

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No. MO-0089117

Owner: College of the Ozarks
Address: PO Box 17, Point Lookout, MO 65726

Continuing Authority: same as above
Address: same as above

Facility Name: College of the Ozarks
Facility Address: 174 Industrial Place, Point Lookout, MO 65726

Legal Description: see page two, Taney County
UTM Coordinates: see page two

Receiving Stream: Tributary to Lake Taneycomo
First Classified Stream and ID: Lake Taneycomo (L2)
USGS Basin & Sub-watershed No.: Fall Creek-Lake Taneycomo (11010003-0101)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

Four year liberal arts college, SIC# 8221. A certified wastewater operator is not required. Additional information on pages two and three.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Sections 640.013, 621.250, and 644.051.6 of the Law.

September 1, 2015
Effective Date


Sara Parker Pauley, Director, Department of Natural Resources

September 30, 2019
Expiration Date


John Madras, Director, Water Protection Program

FACILITY DESCRIPTION (CONTINUED)

OUTFALL #001 – SIC # 8221, 4961

Mill Pond outfall receives excess cooling water which cannot be accepted by the drinking water treatment plant (MOG640013); continuous discharge.

UTM X = 466548 Y = 4119704

Design flow: 1.46 MGD

Average flow: 0.85 MGD

OUTFALL #002 – SIC #8221, 7999

Pool servicing drainage only; filter backwash to WWTF--connected to City of Hollister wastewater treatment facility fall 2011. Formerly swimming pool filter backwash and drainage.

UTM X = 478401 Y = 4052860

Design flow: 0.3 MGD

Average flow: 0 MGD (outfall expected to be used approximately once every three years or less)

OUTFALL #003

Eliminated during a previous permit cycle: former settling basin for power plant; the facility no longer burns coal. Discharges from this outfall is no longer authorized, and shall be subject to 40 CFR 122.41(m) and reported according to 40 CFR 122.41(m)(3)(i) & 40 CFR 122.41(m)(3)(ii).

OUTFALL #004

Eliminated; connected to City of Hollister wastewater treatment facility fall 2011; formerly swimming pool drainage and filter backwash. Discharges from this outfall is no longer authorized, and shall be subject to 40 CFR 122.41(m) and reported according to 40 CFR 122.41(m)(3)(i) & 40 CFR 122.41(m)(3)(ii).

UTM X = 478625, Y = 4051978

OUTFALL #005 – SIC # 8221, 4961

Cooling water discharge from the Rose Garden; no flow in winter

UTM X = 466548, Y = 4119704

Design flow: 0.4 MGD

Average flow: 0.2 MGD

OUTFALL #006 – SIC # 8221, 4961

Cooling water discharge from the museum; no flow in winter

UTM X = 478358, Y = 4052650

Design flow: 0.5MGD

Average flow: 0.25 MGD

OUTFALL #007 – SIC # 8221, 4961

Cooling water discharge from Foster dormitory; no flow in winter

UTM X = 0478353 Y = 4052531

Design flow: 0.5 MGD

Average flow: 0.25 MGD

OUTFALL #008 – SIC # 8221

Cooling water discharge from the field house and ground source heat pump vault overflow; continuous discharge

UTM X = 478399, Y = 4052864

Design flow: 0.75 MGD

Average flow: 0.4 MGD

OUTFALL #009 – SIC #s 8221, 1422

New outfall to this permit. Batch concrete plant and stormwater; from MOG491137 (terminated).

UTM X = 473885, Y = 4052675

Drains 4.69 acres with 95 % runoff coefficient

Average flow: dependent upon precipitation

FACILITY DESCRIPTION (CONTINUED)

PERMITTED FEATURE #010 – SIC # 8221

Cooling water discharge from Barrett Dorm ground source vault, continuous discharge. New feature this permit.

UTM X = 47885, Y = 4052675

Design flow: 0.75 MDG

Average Flow: 0.4 MGD

PERMITTED FEATURE #011 – SIC # 8221

Intake structure, Lake Taneycomo (new feature this permit). Not subject to CWA 316(b)

UTM X = 478291, Y = 4052447

Design flow: 3.8 MGD

Average flow: 2.5 MGD

PERMITTED FEATURE #012 – SIC # 8221

Aeration Basin for dairy barn holding tank (new feature this permit). Discharges from this outfall is not authorized, and shall be subject to 40 CFR 122.41(m) and reported according to 40 CFR 122.41(m)(3)(i) & 40 CFR 122.41(m)(3)(ii).

UTM X = 479037, Y = 4052502

Design flow: 0 (land applied)

Average flow: 0 (land applied)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

OUTFALLS #001, #005, #006, #007, #008, #010 cooling system discharges		TABLE A-1 FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS				
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on September 1, 2015 , and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	MGD	*		*	once/month	24 hr. estimate
Total Suspended Solids	mg/L	30		20	once/month	grab
Temperature, Tcap	°F	90		90	once/month	grab
Oil & Grease	mg/L	15		10	once/month	grab
EFFLUENT PARAMETER(S)	UNITS	DAILY MINIMUM	DAILY MAXIMUM	MONTHLY AVERAGE MINIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
pH **	SU	6.5	9.0		once/month	grab
MONITORING REPORTS SHALL BE SUBMITTED MONTHLY ; THE FIRST REPORT IS DUE OCTOBER 28, 2015 . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

* Monitoring requirement only.

** pH is measured in pH units and is not to be averaged. Facility will report minimum and maximum values.

OUTFALL #002 <i>swimming pool drainage</i>	TABLE A-2 FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on September 1, 2015 , and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	MGD	*		*	once/ discharge	24 hr. estimate
Settleable Solids	mL/L/hr	1.5		1.0	once/ discharge	grab
Total Residual Chlorine (Note 1)	mg/L	0.019 (ML 0.13)		0.019 (ML 0.13)	once/ discharge	grab
EFFLUENT PARAMETER(S)	UNITS	DAILY MINIMUM	DAILY MAXIMUM	MONTHLY AVERAGE MINIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
Dissolved Oxygen	mg/L	5.0		5.0	once/ discharge	grab
pH **	SU	6.5	9.0		once/ discharge	grab
MONITORING REPORTS SHALL BE SUBMITTED NO LATER THAN 60 CALENDAR DAYS FROM THE COMPLETION OF THE DISCHARGE. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS. IT IS A VIOLATION OF THIS PERMIT TO FAIL TO SAMPLE; SAMPLES MUST BE COLLECTED EACH INSTANCE OF POOL DRAINAGE.						

* Monitoring requirement only.

** pH is measured in pH units and is not to be averaged. Facility will report minimum and maximum values.

Note 1 - This permit contains a Total Residual Chlorine (TRC) limit.

This effluent limit is below the minimum quantification level (ML) of the most common and practical EPA approved CLTRC methods. The Department has determined the current acceptable ML for total residual chlorine to be 130 µg/L when using the DPD Colorimetric Method #4500 – CL G. from Standard Methods for the Examination of Waters and Wastewater. The permittee will conduct analyses in accordance with this method, or equivalent, and report actual analytical values. Measured values greater than or equal to the minimum quantification level of 130 µg/L will be considered violations of the permit and values less than the minimum quantification level of 130 µg/L will be considered to be in compliance with the permit limitation. The minimum quantification level does not authorize the discharge of chlorine in excess of the effluent limits stated in the permit. Do not chemically dechlorinate if it is not needed to meet the limits in your permit.

Page 3 of 3

OUTFALL #009 <i>concrete batch plant</i>	TABLE A-3 FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on September 1, 2015 , and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow	MGD	*		*	once/quarter	24 hr. estimate
Total Suspended Solids	mg/L	70		70	once/quarter	grab
Oil & Grease	mg/L	15		10	once/quarter	grab
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter	grab
EFFLUENT PARAMETER(S)	UNITS	DAILY MINIMUM	DAILY MAXIMUM	MONTHLY AVERAGE MINIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
pH **	SU	6.5	9.0		once/quarter	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2016</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

* Monitoring requirement only.

** pH is measured in pH units and is not to be averaged. Facility will report minimum and maximum values.

QUARTERLY SAMPLING SCHEDULE

Minimum Sampling Requirements			
Quarter	Months	Effluent Parameters	Report is Due
First	January, February, March	Sample at least once during any month of the quarter	April 28 th
Second	April, May, June	Sample at least once during any month of the quarter	July 28 th
Third	July, August, September	Sample at least once during any month of the quarter	October 28 th
Fourth	October, November, December	Sample at least once during any month of the quarter	January 28 th

Page 7 of 10

PERMITTED FEATURE #012 dairy wastewater holding tank	TABLE A-4 SYSTEM LIMITATIONS AND MONITORING REQUIREMENTS					
The permittee is authorized to store wastewater as specified in the application for this permit. The final limitations shall become effective on September 1, 2015 , and remain in effect until expiration of the permit. Discharges from this outfall are not authorized and are be subject to 40 CFR 122.41(m) and reported according to 40 CFR 122.41(m)(3)(i) & 40 CFR 122.41(m)(3)(ii). Storage and disposal of wastewater shall be controlled, limited and monitored by the permittee as specified below:						
EFFLUENT PARAMETER(S)	UNITS	FINAL LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MINIMUM		DAILY MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
Basin Operational Monitoring (Note 2)						
Volume Pumped	MGD			*	daily when pumped	total
Freeboard in Tank	feet	*			monthly	total
MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u> ; THE FIRST REPORT IS DUE <u>JANUARY 28, 2016</u> .						

Note 2: Records shall be maintained and summarized into an annual operating report, which shall be submitted by January 28th of each year for the previous calendar year period using report forms approved by the department. The summarized annual report is in addition to the reporting requirements listed in Table A. The summarized annual report shall include the following:

- Record of maintenance and repairs performed during the year, average number of times per month the facility is checked to see if it is operating properly, and description of any unusual operating conditions encountered during the year;
- If illegal discharges from the holding tank/basin occurred during the year, provide how many days the discharges occurred, the discharge flows, the reasons discharges occurred; and cleanup activities related to the discharges;
- A summary of the operations including number of times pumped and total volume pumped.

Tank freeboard is the distance between the static water level and the point at which the tank would overflow.

B. STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached PART I AND PART III standard conditions dated AUGUST 1, 2014 AND MARCH 1, 2015, respectively, and hereby incorporated as though fully set forth herein.

C. SPECIAL CONDITIONS

- This permit may be reopened and modified, or alternatively revoked and reissued, to:
 - Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
 - contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - controls any pollutant not limited in the permit.
 - Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
 - Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.
- All outfalls must be clearly marked in the field. The facility will have 180 days from permit issuance to place signs for the new permitted features.

C. SPECIAL CONDITIONS (CONTINUED)

3. Water Quality Standards

- (a) To the extent required by law, discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
 - (4) The level established by the Director in accordance with 40 CFR 122.44(f).
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.

5. Report as no-discharge when a discharge does not occur during the report period.

6. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).

7. Any pesticide discharge from any point source shall comply with the requirements of Federal Insecticide, Fungicide and Rodenticide Act, as amended (7 U.S.C. 136 ET. SEQ.) and the use of such pesticides shall be in a manner consistent with its label.

8. Water released from basins and holding tanks must be released in a controlled manner so as to prevent stream washout, channelization, or erosion.

9. Reporting of Non-Detects

- (a) An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way that the precision and accuracy of the analyzed result can be enumerated.
- (b) The permittee shall not report a sample result as "Non-Detect" without also reporting the detection limit of the test. Reporting as "Non Detect" without also including the detection limit will be considered failure to report, which is a violation of this permit.
- (c) The permittee shall provide the "Non-Detect" sample result using the less than sign and the minimum detection limit (e.g. <10).
- (d) The permittee shall use one-half of the detection limit for the non-detect result when calculating and reporting monthly averages.
- (e) See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.

C. SPECIAL CONDITIONS (CONTINUED)

10. The permittee shall implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must be prepared and implemented within six months of permit issuance. The SWPPP must be kept on-site and should not be sent to the department unless specifically requested. The SWPPP must be reviewed and updated, if needed, every five (5) years or as site conditions change. The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in the following document: Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators, (Document number EPA 833-B-09-002) published by the United States Environmental Protection Agency (USEPA) in February 2009.
- The SWPPP must include the following:
- (a) A listing of specific Best Management Practices (BMPs) and a narrative explaining how BMPs will be implemented to control and minimize the amount of potential contaminants that may enter stormwater. The BMPs at the facility should be designed to meet this value during rainfall event up to the 10 year, 24 hour rain event.
 - (b) The SWPPP must include a schedule for once per month site inspections and brief written reports. The inspection report must include precipitation information for the entire period since last inspection, as well as observations and evaluations of BMP effectiveness. Deficiencies must be corrected within seven (7) days and the actions taken to correct the deficiencies shall be included with the written report, including photographs. Inspection reports must be kept on site with the SWPPP and maintained for a period of five (5) years. These must be made available to department personnel upon request.
 - (c) A provision for designating an individual to be responsible for environmental matters.
 - (d) A provision for providing training to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Proof of training shall be submitted on request of the department.
11. Permittee shall adhere to the following minimum Best Management Practices (BMPs):
- (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehouse activities and thereby prevent the contamination of stormwater from these substances.
 - (b) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
 - (c) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to stormwater or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of stormwater with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
 - (d) Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
 - (e) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property. This could include the use of straw bales, silt fences, or sediment basins, if needed, to comply with effluent limits.
12. The purpose of the SWPPP and the BMPs listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective in preventing pollution [10 CSR 20-2.010(56)] of waters of the state, and corrective actions means the facility took steps to eliminate the deficiency.
13. Before releasing water that has accumulated in secondary containment areas it must be examined for hydrocarbon odor and presence of a sheen. On-site remediation may take place prior to testing. If the presence of hydrocarbons is indicated, this water must be tested for Total Petroleum Hydrocarbons (TPH). The analytical method for testing TPH must comply with EPA approved testing methods listed in [40 CFR 136] and the water must be tested prior to release to ensure compliance with water quality standards. If the concentration for TPH exceeds 10mg/L, the water shall be taken to a WWTP for treatment.
14. AFO Production Area Requirements
- (a) There shall be no discharge of manure, litter, or process wastewater into waters of the state from production area point sources.
 - (b) Stockpiling of uncovered dry process waste within the production area without runoff collection is not allowed.
 - (c) Liquid and solid wastes shall be land applied according to agronomic rates.
 - (d) Land application shall occur on property owned or leased by the permittee.

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0089117
COLLEGE OF THE OZARKS

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of stormwater from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (Department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)2.] a Factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (operating permit) listed below. A factsheet is not an enforceable part of an operating permit. This factsheet is for an industrial facility.

Part I. FACILITY INFORMATION

Facility Type:	Industrial
Facility SIC Code(s):	8221
Application Date:	12/09/2013
Expiration Date:	06/11/2014
Last Inspection:	12/03/2014, compliance assistance visit

FACILITY DESCRIPTION:

College of the Ozarks is a four year institution of higher learning. The facility has hands on teaching of agricultural practices. A natural gas fired power plant on-site supplies the campus with steam, heating, and cooling for buildings. No changes have occurred at this facility or in the receiving water body that effects effluent limit derivations.

New to this permit, the dairy barn has approximately 65 head of milking cows maximum throughout the year. The waste storage basin is included in this permit. The school applies liquid wastes about every two to three months, and solids about three to four times per year. This operation is not subject to permitting if it was a stand-alone operation. However, because of the other concomitant industrial activities at the site, the basin will receive operational monitoring requirements (already being performed by the permittee) and general animal feeding operation (AFO) permit conditions. A discussion with the permittee's farm general manager, the operation is already adhering to standard agricultural practices and applicable best management practices.

The department also has added outfall #009, the concrete batch plant, and outfall #010, cooling water discharge outfall at the Barrett dorm. Outfalls #009 and #010 are in the same location. Permitted feature #011 is the intake structure, not subject to Clean Water Act section 316(b).

FACILITY PERFORMANCE HISTORY & COMMENTS:

The discharge monitoring reports showed three instances of reports not being received by the regional office. In August of 2013, the permittee reported a 6.4 SU pH for outfalls #006, #007, and #008. The pH limits are 6.5 to 9.0. No other violations were noted.

PERMITTED FEATURES TABLE:

	DESIGN FLOW	TREATMENT LEVEL	EFFLUENT TYPE
#001	1.46 MGD	none	building cooling water, continuous
#002	intermittent	none	swimming pool drainage water, expected once every three years
#003	none	n/a	outfall removed, no discharge
#004	none	n/a	outfall removed, connected to Hollister WWTF
#005	0.4 MGD	none	building cooling water, seasonal
#006	0.5 MGD	none	building cooling water, seasonal
#007	0.5 MGD	none	building cooling water, seasonal
#008	0.75 MGD	none	building cooling water, continuous
#009	intermittent	settling	stormwater, truck wash water, and concrete batch plant process water
#010	0.75	none	building cooling water, continuous
#011	2700 MGD	intake	intake
#012	0	aeration	no-discharge; waste from animals in the dairy barn

Part II. RECEIVING STREAM INFORMATION**RECEIVING WATER BODY'S WATER QUALITY:**

Lake Taneycomo is a highly used waterbody of Missouri. This lake exhibits properties of both a lake and a stream as it is supplied by releases from Table Rock Dam. The TMDL associated with this watershed is concerned with low dissolved oxygen (DO). The report details the low DO levels are caused by the water released from the hypolimnion (bottom portion) of the dam which is, by nature, low in dissolved oxygen. Uses to be maintained for this lake are irrigation, livestock watering, aquatic life, cold water fishery, whole body contact class A, secondary contact recreation, and drinking water. It is a class L2 Lake. The waterbody ID for Lake Taneycomo is 7314.

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

As per Missouri's Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into the below listed seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall's Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits section.

Missouri or Mississippi River:	<input type="checkbox"/>
Lake or Reservoir:	<input checked="" type="checkbox"/>
Losing:	<input type="checkbox"/>
Metropolitan No-Discharge:	<input type="checkbox"/>
Special Stream:	<input type="checkbox"/>
Subsurface Water:	<input type="checkbox"/>
All Other Waters:	<input checked="" type="checkbox"/>

As per Missouri's Stormwater Regulations [10 CSR 20.6.200(6)(B)2.], the department shall establish effluent limits as necessary to protect waters of the state. Effluent limitations for stormwater are established using best professional judgment based on the category and designated uses of the receiving stream.

10 CSR 20-7.031 Missouri Water Quality Standards, the Department defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and 1st classified receiving stream's beneficial water uses to be maintained are located in the Receiving Stream Table located below in accordance with [10 CSR 20-7.031(3)]. Table G "Lake Classifications and Use Designations" at 10 CSR 20-7.031 indicate the uses to be maintained for Lake Taneycomo are protection of aquatic life, cold water fishery, drinking water, irrigation, livestock watering, recreational secondary contact (boating, wading, and the like) and whole body contact category A which is swimming and whole body immersion.

Part III. RATIONALE AND DERIVATION OF EFFLUENT LIMITATIONS & PERMIT CONDITIONS

ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:

As per [10 CSR 20-7.015(4)(A)], discharges to losing streams shall be permitted only after other alternatives including land application, discharges to a gaining stream and connection to a regional wastewater treatment facility have been evaluated and determined to be unacceptable for environmental and/or economic reasons.

- ✓ Not Applicable; The facility does not discharge to a losing stream as defined by [10 CSR 20-2.010(36)] & [10 CSR 20-7.031(1)(N)], or is an existing facility.

ANTI-BACKSLIDING:

A provision in the Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

- ✓ Limitations in this operating permit for the reissuance of this permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.
 - ✓ The Department determines that technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b).
 - ✓ The facility was required to sample for BOD₅ and phosphorous. These parameters were applied in error in the previous permit as the facility does not contribute any biologically available contaminants or nutrients to the cooling water system discharges. Parameters removed.
 - ✓ The facility stated during the 07/13/2011 inspection they do not use chlorine for the cooling water system. This parameter and the associated dissolved oxygen parameter have been removed.

ANTIDEGRADATION:

In accordance with Missouri's Water Quality Standard [10 CSR 20-7.031(2)], the Department is to document by means of Antidegradation Review that the use of a water body's available assimilative capacity is justified. Degradation is justified by documenting the socio-economic importance of a discharging activity after determining the necessity of the discharge.

- ✓ Renewal, no degradation proposed, and no further review necessary.

BIOSOLIDS & SEWAGE SLUDGE:

Biosolids are solid materials resulting from domestic wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information regarding biosolids and sludge is located at the following web address:

<http://extension.missouri.edu/main/DisplayCategory.aspx?C=74>, items WQ422 through WQ449.

- ✓ Permittee land applies biosolids in accordance with Standard Conditions III and a Department approved sludge management plan.

COMPLIANCE AND ENFORCEMENT:

Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the WPP is to resolve violations and return the entity to compliance.

- ✓ Not Applicable. The permittee/facility is not currently under Water Protection Program enforcement action.

COOLING WATER INTAKE STRUCTURE:

This facility is not subject to new rules promulgating the Clean Water Act §316(b). Cooling water for the purposes of the new rule is "to dissipate that portion of the heat that is a byproduct of industrial process that facilities have not used and therefore view as waste heat". The water withdrawn from Lake Taneycomo is approximately 2.7 MGD, however, the facility uses the water for building cooling, not cooling the power plant which is fired by natural gas. Also, the power plant does not distribute electricity for sale as its primary function and the withdrawn water also supplies a drinking water plant. While the new rules do not specifically apply, the facility may review 40 CFR 122.21 (r) and 40 CFR 125 Subpart J to determine if impingement or entrainment protections may benefit the facility and protect aquatic organisms.

INDUSTRIAL SLUDGE:

Industrial sludge is solids, semi-solids, or liquid residue generated during the treatment of industrial process wastewater in a treatment works; including but not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment process; scum and solids filtered from water supplies and backwashed; and a material derived from industrial sludge.

- ✓ Permittee land applies industrial sludge in accordance with Standard Conditions III and a Department approved sludge management plan.

REASONABLE POTENTIAL ANALYSIS (RPA):

Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above narrative or numeric water quality standard. In accordance with [40 CFR Part 122.44(d)(1)(iii)] if the permit writer determines that any give pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for that pollutant.

✓ Not applicable; a RPA was not conducted for this facility.

SCHEDULE OF COMPLIANCE (SOC):

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit.

✓ Not applicable. This permit does not contain a SOC.

SPILL REPORTING:

Per 10 CSR 24-3.010, any emergency involving a hazardous substance must be reported to the department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. The department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply whether or not the spill results in chemicals or materials leaving the permitted property or reaching waters of the state. This requirement is in addition to the Noncompliance Reporting requirement found in Standard Conditions Part I.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

In accordance with 40 CFR 122.44(k) *Best Management Practices (BMPs)* to control or abate the discharge of pollutants when: (1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; (2) Authorized under section 402(p) of the CWA for the control of stormwater discharges; (3) Numeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (Document number EPA 833-B-09-002) [published by the United States Environmental Protection Agency (USEPA) in February 2009], BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure. Additionally in accordance with the Stormwater Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions which prevent or control the pollution of stormwater discharges. The purpose of a SWPPP is to comply with all applicable stormwater regulations by creating an adaptive management plan to control and mitigate pollution of stormwater runoff. Developing a SWPPP provides opportunities to employ appropriate BMPs to minimize the risk of pollutants being discharged with during storm events. In order to effectively control the pollutants being discharged in stormwater runoff, potential stormwater pollution sources must be identified. Areas which should be included in the SWPPP are identified in 40 CFR 122.26(b)(14). Once these potential sources of stormwater pollution have been identified, a plan should be formulated to best control the amount of pollutant being released and discharged by each activity or source. This should include, but is not limited to, minimizing exposure to stormwater, good housekeeping measures, proper facility and equipment maintenance, spill prevention and response, vehicle traffic control, and proper materials handling. Once a plan has been developed, employ the control measures that have been determined to be adequate to achieve the benchmark values discussed above. Conduct monitoring and inspections of the BMPs to ensure they are working properly. Re-evaluate any BMP that is not achieving compliance with permitting requirements. For example, if sample results from an outfall show values of TSS above the limit value, the BMP being employed is deficient in controlling stormwater pollution. Corrective action should be taken to repair, improve or replace the failing BMP. This internal evaluation is required at least once per month but should be continued more frequently if BMPs continue to fail. If failures do occur, continue this trial and error process until appropriate BMPs have been established.

✓ Applicable. A SWPPP shall be developed and implemented for each site and shall incorporate required practices identified by the Department with jurisdiction, incorporate erosion control practices specific to site conditions, and provide for maintenance and adherence to the plan.

303(d) LIST:

Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

✓ Not applicable. This stream was listed on the Missouri 303(d) List for low dissolved oxygen but was removed from the 303(d) List when a TMDL was approved. See below.

TOTAL MAXIMUM DAILY LOAD (TMDL):

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected; hence, the purpose of a TMDL is to determine the pollutant loading a specific waterbody can assimilate without exceeding water quality standards. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation.

- ✓ Applicable. Lake Taneycomo is associated with the 2010 EPA Approved TMDL for reduced dissolved oxygen. This facility is not considered to be a source of the above listed pollutant or considered to contribute to the impairment of Lake Taneycomo. Deep water discharges from Table Rock Lake for the purpose of generating electrical power provides discharge of water cool enough to maintain a cold-water fishery in Lake Taneycomo, the tailwater of Table Rock Dam. However, due to thermal stratification in the lake during summer through early winter, cold water in the lower layers of the lake does not mix with the warmer surface water and becomes depleted of dissolved oxygen (DO), resulting in lower concentrations of DO entering Lake Taneycomo.

VARIANCE:

As per the Missouri Clean Water Law § 644.061.4, variances shall be granted for such period of time and under such terms and conditions as shall be specified by the commission in its order. The variance may be extended by affirmative action of the commission. In no event shall the variance be granted for a period of time greater than is reasonably necessary for complying with the Missouri Clean Water Law §§644.006 to 644.141 or any standard, rule or regulation promulgated pursuant to Missouri Clean Water Law §§644.006 to 644.141.

- ✓ Not applicable. This operating permit is not drafted under premises of a petition for variance.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

As per [10 CSR 20-2.010(78)], the amount of pollutant each discharger is allowed by the Department to release into a given stream after the Department has determined total amount of pollutant that may be discharged into that stream without endangering its water quality.

- ✓ Not applicable. No mixing is allowed at this site.

WLA MODELING:

There are two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs). If TBELs do not provide adequate protection for the receiving waters, then WQBEL must be used.

- ✓ Not applicable. A WLA study was either not submitted or determined not applicable by Department staff.

WATER QUALITY STANDARDS:

Per [10 CSR 20-7.031(4)], general criteria shall be applicable to all waters of the state at all times including mixing zones. Additionally, [40 CFR 122.44(d)(1)] directs the Department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

WHOLE EFFLUENT TOXICITY (WET) TEST:

A WET test is a quantifiable method of determining if a discharge from a facility may be causing toxicity to aquatic life by itself, in combination with or through synergistic responses when mixed with receiving stream water.

- ✓ Not applicable; at this time, the permittee is not required to conduct WET test for this facility. The facility is not a major, does not exceed design flows, and does not handle large quantities of toxic substances.

Part IV. EFFLUENT LIMITS DETERMINATION

Effluent limitations derived and established in the below Effluent Limitations Tables are based on current operations of the facility. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

OUTFALLS #001, #005, #006, #007, #008, AND #010

–Cooling Water Outfalls

EFFLUENT LIMITATIONS TABLE:

PARAMETERS	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	MONTHLY AVERAGE MAXIMUM	PREVIOUS PERMIT LIMITATIONS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL								
FLOW	MGD	1	*	*	SAME	ONCE/MONTH	ONCE/MONTH	ESTIMATE
TEMPERATURE	°F	1, 2	90	90	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
CONVENTIONAL								
OIL & GREASE	MG/L	1, 2	15	10	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
pH	SU	1, 2	6.5-9	6.5-9	SAME	ONCE/MONTH	ONCE/MONTH	GRAB
TSS	MG/L	6	30	20	SAME	ONCE/MONTH	ONCE/MONTH	GRAB

* - Monitoring requirement only

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 5. Water Quality Model |
| 2. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 3. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 4. Antidegradation Review/Policy | 8. WET Test Policy |

DERIVATION AND DISCUSSION OF LIMITS:**Flow**

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification. Units changed from gallons per day to MGD-millions of gallons per day to align with other facilities.

Oil & Grease

Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A: *Criteria for Designated Uses*; 10 mg/L monthly average (chronic standard). The daily maximum was calculated using the *Technical Support Document for Water Quality-Based Toxics Control* (EPA/505/2-90-001). Section 5.4.2 indicates the waste load allocation can be set to the chronic standard. When the chronic standard is multiplied by 1.5, the daily maximum can be calculated. Hence, $10 * 1.5 = 15$ mg/L for the daily maximum.

pH

6.5 to 9.0 SU. Water Quality Standard at 10 CSR 20-7.015 states water contaminants shall not cause pH to be outside the range of 6.5 to 9.0 SU; continued from previous permit.

Total Suspended Solids (TSS)

30 mg/L as a daily maximum and 20 mg/L as a monthly average; continued from previous permit. There is no water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter. Effluent limitations from the previous state operating permit have been reassessed and verified that they are still protective of the receiving stream's Water Quality. Effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information**.

Temperature

Lake Taneycomo is a cold water fishery [10 CSR 20-7.031(5)(D)3], however, the discharges are to tributaries of the Lake therefore 10 CSR 20.7031(5)(D)1 applies. In accordance with 10 CSR 20-7.031(5)(D), water contaminant sources shall not cause or contribute to stream temperature in excess of 90 degrees Fahrenheit. The permit will only require temperature be monitored and reported in degrees Fahrenheit.

ΔT

Change in temperature, ΔT, is not applicable because the facility withdraws from Lake Taneycomo--however, the discharges are to tributaries of the Lake.

OUTFALL #002

-- Swimming pool drainage, infrequent discharge; filter backwash sent to Hollister WWTF

EFFLUENT LIMITATIONS TABLE:

PARAMETERS	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	MONTHLY AVERAGE MAXIMUM	PREVIOUS PERMIT LIMITATIONS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL								
FLOW	MGD	1	*	*	SAME	ONCE/ DISCHARGE	ONCE/ DISCHARGE	ESTIMATE
CONVENTIONAL								
CHLORINE, TOTAL RESIDUAL	MG/L	1, 2	0.019	0.019	SAME	ONCE/ DISCHARGE	ONCE/ DISCHARGE	GRAB
DISSOLVED OXYGEN	MG/L	1	5.0 MINIMUM	5.0 MINIMUM	SAME	ONCE/ DISCHARGE	ONCE/ DISCHARGE	GRAB
pH		1, 2	6.5 TO 9	6.5 TO 9	SAME	ONCE/ DISCHARGE	ONCE/ DISCHARGE	GRAB
SETTLEABLE SOLIDS	ML/L/HR	6	1.5	1.0	SAME	ONCE/ DISCHARGE	ONCE/ DISCHARGE	GRAB

* - Monitoring requirement only

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 5. Water Quality Model |
| 2. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 3. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 4. Antidegradation Review/Policy | 8. WET Test Policy |

DERIVATION AND DISCUSSION OF LIMITS:**Chlorine, Total Residual (TRC)**

This limit corresponds to Missouri's acute toxicity criteria for the protection of aquatic life (10 CSR 20-7.031). Acute criteria apply at the end of pipe because discharges are expected to be episodic in nature and lasting less than four days. No mixing zone is allowed. Standard compliance language for TRC, including the minimum level (ML), is included in the permit. Minimum level required for reporting purposes is 130 µg/L. These limits are essentially the same as previous effluent limitations: 0.019 mg/L daily maximum, 0.0095 mg/L monthly average. No schedule of compliance is allowed because the facility expects to only drain the pool once every three or four years. The limits are derived exactly from the swimming pool general permit.

Dissolved Oxygen

The previous permit and the general permit for swimming pools sets DO at a minimum of 5.0 mg/L. This value is protective of the receiving waterbody's water quality and is retained.

Flow

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification. Units changed from gallons per day to MGD-millions of gallons per day to align with other facilities.

pH

6.5 to 9.0 SU. Water Quality Standard at 10 CSR 20-7.015 states water contaminants shall not cause pH to be outside the range of 6.5 to 9.0 SU.

Settleable Solids

The previous permit and the general permit for swimming pool discharges set the daily maximum at 1.5 mL/L/hr and the monthly average at 1.0 mL/L/hour. These limits have been reassess and verified they are protective of the receiving waterbody's water quality and are retained.

OUTFALL #009

-- Concrete batch plant, process water and stormwater

EFFLUENT LIMITATIONS TABLE:

PARAMETERS	UNIT	BASIS FOR LIMITS	DAILY MAXIMUM	MONTHLY AVERAGE MAXIMUM	PREVIOUS PERMIT LIMITATIONS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL								
FLOW	MGD	1	*	*	*, *	ONCE/QUARTER	ONCE/QUARTER	ESTIMATE
PRECIPITATION	INCHES	6	*	n/a	NEW	ONCE/QUARTER	ONCE/QUARTER	MEASURED
CONVENTIONAL								
OIL & GREASE	MG/L	1, 3	15	10	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
pH	SU	1, 2	6.5-9	6.5-9	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
SETTLABLE SOLIDS	ML/L/HR	6	1.5	1.0	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB
TSS	MG/L	6	70	70	SAME	ONCE/QUARTER	ONCE/QUARTER	GRAB

* - Monitoring requirement only

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 1. State or Federal Regulation/Law | 5. Water Quality Model |
| 2. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 3. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 4. Antidegradation Review/Policy | 8. WET Test Policy |

DERIVATION AND DISCUSSION OF LIMITS:**Flow**

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification. Units changed from gallons per day to MGD-millions of gallons per day to align with other facilities.

Oil & Grease

Conventional pollutant, in accordance with 10 CSR 20-7.031 Table A: *Criteria for Designated Uses*; 10 mg/L monthly average (chronic standard). The daily maximum was calculated using the *Technical Support Document for Water Quality-Based Toxics Control* (EPA/505/2-90-001). Section 5.4.2 indicates the waste load allocation can be set to the chronic standard. When the chronic standard is multiplied by 1.5, the daily maximum can be calculated. Hence, $10 * 1.5 = 15$ mg/L for the daily maximum.

pH

6.5 to 9.0 SU. Water Quality Standard at 10 CSR 20-7.015 states water contaminants shall not cause pH to be outside the range of 6.5 to 9.0 SU.

Precipitation

Monitoring only requirement; measuring the amount of precipitation [(10 CSR 20-6.200(2)(C)1.E(VI)] during an event is necessary to ensure adequate stormwater management exists at the site. Knowing the amount of potential stormwater runoff can provide the permittee a better understanding of specific control measure that should be employed to ensure protection of water quality. The facility should only report the amount of rainfall for the 24 hours of the day the samples were collected.

Settleable Solids

There is no water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. Settleable solids are also a valuable indicator parameter. Solids monitoring allows the permittee to identify increases in sediment and solids that may indicate uncontrolled materials leaving the site. The general permit MOG491137 provided a daily maximum of 1.5 mL/L/hr and a monthly average of 1.0 mL/L/hr. These limits have been reassessed and verified they are protective of the receiving water.

Total Suspended Solids (TSS)

Effluent limitations from the previous state operating permit have been reassessed and verified that they are still protective of the receiving stream's Water Quality. Effluent limitations have been retained from previous state operating permit; 70 mg/L as a daily maximum and 70 mg/L as a monthly average.

OUTFALL #012

--Dairy Barn AFO Holding Structure

EFFLUENT LIMITATIONS TABLE:

PARAMETERS	UNIT	BASIS FOR LIMITS	DAILY MINIMUM	DAILY MAXIMUM	PREVIOUS PERMIT LIMITATIONS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL								
VOLUME PUMPED	MGD	6		*	NEW	ONCE/DAY WHEN PUMPING	ONCE/QUARTER	ESTIMATE
FREEBOARD IN TANK	FEET	6	*		NEW	ONCE/MONTH	ONCE/QUARTER	MEASURED

* - Monitoring requirement only

Basis for Limitations Codes:

- | | |
|--|-----------------------------------|
| 5. State or Federal Regulation/Law | 5. Water Quality Model |
| 6. Water Quality Standard (includes RPA) | 6. Best Professional Judgment |
| 7. Water Quality Based Effluent Limits | 7. TMDL or Permit in lieu of TMDL |
| 8. Antidegradation Review/Policy | 8. WET Test Policy |

DERIVATION AND DISCUSSION OF LIMITS:

The facility is to operate this structure as a no-discharge outfall. Freeboard will be monitored monthly and the volume pumped will be monitored daily when being pumped out. These values are reported to the department on a quarterly basis.

Volume Pumped

Estimated millions of gallons per day of liquids or biosolids removed from the structure. There is no need to report zero on days where no extraction took place.

Freeboard

The distance in feet between the top of the water level and the point at which the water would discharge from the structure.

Operational Monitoring

The facility will provide the operational monitoring data to the department in a yearly report. See table A-4 on page 7 of the permit. And Note 2.

SAMPLING FREQUENCY JUSTIFICATION

Sampling and Reporting Frequency was retained from previous permit.

SAMPLING TYPE JUSTIFICATION

The facility has been collecting grab samples at the site. The procedure has been assessed and determined to be protective of the receiving waterbody's water quality. For further information on sampling and testing methods see 10 CSR 20-7.015(9)(D)2.

Part V. ADMINISTRATIVE REQUIREMENTS

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

PERMIT SYNCHRONIZATION:

The Department of Natural Resources is currently undergoing a synchronization process for operating permits. Permits are normally issued on a five-year term, but to achieve synchronization many permits will need to be issued for less than the full five years allowed by regulation. The intent is that all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. This will allow further streamlining by placing multiple permits within a smaller geographic area on public notice simultaneously, thereby reducing repeated administrative efforts. This will also allow the department to explore a watershed based permitting effort at some point in the future. Renewal applications must continue to be submitted within 180 days of expiration, however, in instances where effluent data from the previous renewal is less than three years old, that data may be re-submitted to meet the requirements of the renewal application. If the permit provides a schedule of compliance for meeting new water quality based effluent limits beyond the expiration date of the permit, the time remaining in the schedule of compliance will be allotted in the renewed permit. *This permit will retain synchronization by expiring in the third quarter of 2019.*

PUBLIC NOTICE:

The Department shall give public notice that a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in and water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and permittee must be notified of the denial in writing.

The Department must issue public notice of a pending operating permit or of a new or reissued statewide general permit. The public comment period is the length of time not less than 30 days following the date of the public notice which interested persons may submit written comments about the proposed permit.

For persons wanting to submit comments regarding this proposed operating permit, then please refer to the Public Notice page located at the front of this draft operating permit. The Public Notice page gives direction on how and where to submit appropriate comments.

The Public Notice period for this operating permit was from June 5, 2015 to July 6, 2015. No responses were received.

DATE OF FACT SHEET: JULY 2015

COMPLETED BY:

PAM HACKLER, ENVIRONMENTAL SCIENTIST
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION - INDUSTRIAL UNIT
573-526-3386
pam.hackler@dnr.mo.gov

Divergences between Public Notice Version and Final Version:

- An omission was noted regarding special condition #2. The following statement was added: "The facility will have 180 days from permit issuance to place signs for the new permitted features." The permittee was contacted prior to the finalization and agreed upon the standard 6 month timeframe.
- GPS corrections were made for outfall #009 and #010.
- Table A-2 of the permit and table on page 8 of the fact sheet for outfall #002: a typographical error regarding units on Settleable Solids was changed from mg/L to mL/L/hour. This does not affect the limit.
- Table A-4, volume pumped, was changed from gallons to MGD. This change reflects the way the department's database will accept data for this parameter. Gallons was not an option.
- Language was added on page 10 of the fact sheet to clarify monitoring and reporting of permitted feature #012; the effluent limitations table was also added.



STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

These Standard Conditions incorporate permit conditions as required by 40 CFR 122.41 or other applicable state statutes or regulations. These minimum conditions apply unless superseded by requirements specified in the permit.

Part I – General Conditions

Section A – Sampling, Monitoring, and Recording

1. **Sampling Requirements.**
 - a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - b. All samples shall be taken at the outfall(s) or Missouri Department of Natural Resources (Department) approved sampling location(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.
2. **Monitoring Requirements.**
 - a. Records of monitoring information shall include:
 - i. The date, exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) who performed the analyses;
 - v. The analytical techniques or methods used; and
 - vi. The results of such analyses.
 - b. If the permittee monitors any pollutant more frequently than required by the permit at the location specified in the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reported to the Department with the discharge monitoring report data (DMR) submitted to the Department pursuant to Section B, paragraph 7.
3. **Sample and Monitoring Calculations.** Calculations for all sample and monitoring results which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.
4. **Test Procedures.** The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure that the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations that are low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is “sufficiently sensitive” when; 1) the method minimum level is at or below the level of the applicable water quality criterion for the pollutant or, 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility’s discharge is high enough that the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015. These methods are also required for parameters that are listed as monitoring only, as the data collected may be used to determine if limitations need to be established. A permittee is responsible for working with their contractors to ensure that the analysis performed is sufficiently sensitive.
5. **Record Retention.** Except for records of monitoring information required by the permit related to the permittee’s sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

6. **Illegal Activities.**
 - a. The Federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two (2) years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or both.
 - b. The Missouri Clean Water Law provides that any person or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than six (6) months, or by both. Second and successive convictions for violation under this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

Section B – Reporting Requirements

1. **Planned Changes.**
 - a. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
 - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
 - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1);
 - iii. The alteration or addition results in a significant change in the permittee’s sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
 - iv. Any facility expansions, production increases, or process modifications which will result in a new or substantially different discharge or sludge characteristics must be reported to the Department 60 days before the facility or process modification begins. Notification may be accomplished by application for a new permit. If the discharge does not violate effluent limitations specified in the permit, the facility is to submit a notice to the Department of the changed discharge at least 30 days before such changes. The Department may require a construction permit and/or permit modification as a result of the proposed changes at the facility.
2. **Non-compliance Reporting.**
 - a. The permittee shall report any noncompliance which may endanger health or the environment. Relevant information shall be provided orally or via the current electronic method approved by the Department, within 24 hours from the time the permittee becomes aware of the circumstances, and shall be reported to the appropriate Regional Office during normal business hours or the Environmental Emergency Response hotline at 573-634-2436 outside of normal business hours. A written submission shall also be provided within five (5) business days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.



STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

- b. The following shall be included as information which must be reported within 24 hours under this paragraph.
 - i. Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - ii. Any upset which exceeds any effluent limitation in the permit.
 - iii. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit required to be reported within 24 hours.
 - c. The Department may waive the written report on a case-by-case basis for reports under paragraph 2. b. of this section if the oral report has been received within 24 hours.
3. **Anticipated Noncompliance.** The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The notice shall be submitted to the Department 60 days prior to such changes or activity.
 4. **Compliance Schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date. The report shall provide an explanation for the instance of noncompliance and a proposed schedule or anticipated date, for achieving compliance with the compliance schedule requirement.
 5. **Other Noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs 2, 3, and 6 of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 2. a. of this section.
 6. **Other Information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.
 7. **Discharge Monitoring Reports.**
 - a. Monitoring results shall be reported at the intervals specified in the permit.
 - b. Monitoring results must be reported to the Department via the current method approved by the Department, unless the permittee has been granted a waiver from using the method. If the permittee has been granted a waiver, the permittee must use forms provided by the Department.
 - c. Monitoring results shall be reported to the Department no later than the 28th day of the month following the end of the reporting period.
- b. Notice.
 - i. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
 - ii. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section B – Reporting Requirements, paragraph 5 (24-hour notice).
 - c. Prohibition of bypass.
 - i. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
 1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 3. The permittee submitted notices as required under paragraph 2. b. of this section.
 - ii. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three (3) conditions listed above in paragraph 2. c. i. of this section.
3. **Upset Requirements.**
 - a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 3. b. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
 - b. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - i. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - ii. The permitted facility was at the time being properly operated; and
 - iii. The permittee submitted notice of the upset as required in Section B – Reporting Requirements, paragraph 2. b. ii. (24-hour notice).
 - iv. The permittee complied with any remedial measures required under Section D – Administrative Requirements, paragraph 4.
 - c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

Section C – Bypass/Upset Requirements

1. **Definitions.**
 - a. *Bypass*: the intentional diversion of waste streams from any portion of a treatment facility, except in the case of blending.
 - b. *Severe Property Damage*: substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
 - c. *Upset*: an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
2. **Bypass Requirements.**
 - a. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2. b. and 2. c. of this section.

Section D – Administrative Requirements

1. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Missouri Clean Water Law and Federal Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.
 - a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
 - b. The Federal Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The Federal Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement



STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

- c. Any person may be assessed an administrative penalty by the EPA Director for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.
 - d. It is unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law, or any standard, rule or regulation promulgated by the commission. In the event the commission or the director determines that any provision of sections 644.006 to 644.141 of the Missouri Clean Water Law or standard, rules, limitations or regulations promulgated pursuant thereto, or permits issued by, or any final abatement order, other order, or determination made by the commission or the director, or any filing requirement pursuant to sections 644.006 to 644.141 of the Missouri Clean Water Law or any other provision which this state is required to enforce pursuant to any federal water pollution control act, is being, was, or is in imminent danger of being violated, the commission or director may cause to have instituted a civil action in any court of competent jurisdiction for the injunctive relief to prevent any such violation or further violation or for the assessment of a penalty not to exceed \$10,000 per day for each day, or part thereof, the violation occurred and continues to occur, or both, as the court deems proper. Any person who willfully or negligently commits any violation in this paragraph shall, upon conviction, be punished by a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both. Second and successive convictions for violation of the same provision of this paragraph by any person shall be punished by a fine of not more than \$50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.
2. **Duty to Reapply.**
- a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
 - b. A permittee with a currently effective site-specific permit shall submit an application for renewal at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission

for applications to be submitted later than the expiration date of the existing permit.)

- c. A permittee with currently effective general permit shall submit an application for renewal at least 30 days before the existing permit expires, unless the permittee has been notified by the Department that an earlier application must be made. The Department may grant permission for a later submission date. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
3. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
4. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
5. **Proper Operation and Maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
6. **Permit Actions.**
- a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
 - i. Violations of any terms or conditions of this permit or the law;
 - ii. Having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
 - iii. A change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
 - iv. Any reason set forth in the Law or Regulations.
 - b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
7. **Permit Transfer.**
- a. Subject to 10 CSR 20-6.010, an operating permit may be transferred upon submission to the Department of an application to transfer signed by the existing owner and the new owner, unless prohibited by the terms of the permit. Until such time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
 - b. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Missouri Clean Water Law or the Federal Clean Water Act.
 - c. The Department, within 30 days of receipt of the application, shall notify the new permittee of its intent to revoke or reissue or transfer the permit.
8. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Federal Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
9. **Property Rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.



STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

10. **Duty to Provide Information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.
11. **Inspection and Entry.** The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Federal Clean Water Act or Missouri Clean Water Law, any substances or parameters at any location.
12. **Closure of Treatment Facilities.**
 - a. Persons who cease operation or plan to cease operation of waste, wastewater, and sludge handling and treatment facilities shall close the facilities in accordance with a closure plan approved by the Department.
 - b. Operating Permits under 10 CSR 20-6.010 or under 10 CSR 20-6.015 are required until all waste, wastewater, and sludges have been disposed of in accordance with the closure plan approved by the Department and any disturbed areas have been properly stabilized. Disturbed areas will be considered stabilized when perennial vegetation, pavement, or structures using permanent materials cover all areas that have been disturbed. Vegetative cover, if used, shall be at least 70% plant density over 100% of the disturbed area.
13. **Signatory Requirement.**
 - a. All permit applications, reports required by the permit, or information requested by the Department shall be signed and certified. (See 40 CFR 122.22 and 10 CSR 20-6.010)
 - b. The Federal Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.
 - c. The Missouri Clean Water Law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than ten thousand dollars, or by imprisonment for not more than six months, or by both.
14. **Severability.** The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.

STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
March 1, 2015

**PART III – SLUDGE AND BIOSOLIDS FROM DOMESTIC AND INDUSTRIAL WASTEWATER
TREATMENT FACILITIES**

SECTION A – GENERAL REQUIREMENTS

1. This permit pertains to sludge requirements under the Missouri Clean Water Law and regulation for domestic wastewater and industrial process wastewater. This permit also incorporates applicable federal sludge disposal requirements under 40 CFR 503 for domestic wastewater. The Environmental Protection Agency (EPA) has principal authority for permitting and enforcement of the federal sludge regulations under 40 CFR 503 for domestic wastewater. EPA has reviewed and accepted these standard sludge conditions. EPA may choose to issue a separate sludge addendum to this permit or a separate federal sludge permit at their discretion to further address the federal requirements.
2. These PART III Standard Conditions apply only to sludge and biosolids generated at domestic wastewater treatment facilities, including public owned treatment works (POTW), privately owned facilities and sludge or biosolids generated at industrial facilities.
3. Sludge and Biosolids Use and Disposal Practices:
 - a. The permittee is authorized to operate the sludge and biosolids treatment, storage, use, and disposal facilities listed in the facility description of this permit.
 - b. The permittee shall not exceed the design sludge volume listed in the facility description and shall not use sludge disposal methods that are not listed in the facility description, without prior approval of the permitting authority.
 - c. The permittee is authorized to operate the storage, treatment or generating sites listed in the Facility Description section of this permit.
4. Sludge Received from other Facilities:
 - a. Permittees may accept domestic wastewater sludge from other facilities including septic tank pumpings from residential sources as long as the design sludge volume is not exceeded and the treatment facility performance is not impaired.
 - b. The permittee shall obtain a signed statement from the sludge generator or hauler that certifies the type and source of the sludge
5. These permit requirements do not supersede nor remove liability for compliance with county and other local ordinances.
6. These permit requirements do not supersede nor remove liability for compliance with other environmental regulations such as odor emissions under the Missouri Air Pollution Control Law and regulations.
7. This permit may (after due process) be modified, or alternatively revoked and reissued, to comply with any applicable sludge disposal standard or limitation issued or approved under Section 405(d) of the Clean Water Act under Chapter 644 RSMo.
8. In addition to STANDARD CONDITIONS, the Department may include sludge limitations in the special conditions portion or other sections of a site specific permit.
9. Alternate Limits in the Site Specific Permit.

Where deemed appropriate, the Department may require an individual site specific permit in order to authorize alternate limitations:

 - a. A site specific permit must be obtained for each operating location, including application sites.
 - b. To request a site specific permit, an individual permit application, permit fee, and supporting documents shall be submitted for each operating location. This shall include a detailed sludge/biosolids management plan or engineering report.
10. Exceptions to these Standard Conditions may be authorized on a case-by-case basis by the Department, as follows:
 - a. The Department will prepare a permit modification and follow permit notice provisions as applicable under 10 CSR 20-6.020, 40 CFR 124.10, and 40 CFR 501.15(a)(2)(ix)(E). This includes notification of the owner of the property located adjacent to each land application site, where appropriate.
 - b. Exceptions cannot be granted where prohibited by the federal sludge regulations under 40 CFR 503.

SECTION B – DEFINITIONS

1. Best Management Practices include agronomic loading rates, soil conservation practices and other site restrictions.
2. Biosolids means organic fertilizer or soil amendment produced by the treatment of domestic wastewater sludge.
3. Biosolids land application facility is a facility where biosolids are spread onto the land at agronomic rates for production of food or fiber. The facility includes any structures necessary to store the biosolids until soil, weather, and crop conditions are favorable for land application.
4. Class A biosolids means a material that has met the Class A pathogen reduction requirements or equivalent treatment by a Process to Further Reduce Pathogens (PFRP) in accordance with 40 CFR 503.
5. Class B biosolids means a material that has met the Class B pathogen reduction requirements or equivalent treatment by a Process to Significantly Reduce Pathogens (PFRP) in accordance with 40 CFR 503.
6. Domestic wastewater means wastewater originating from the sanitary conveniences of residences, commercial buildings, factories and institutions; or co-mingled sanitary and industrial wastewater processed by a (POTW) or a privately owned facility.
7. Industrial wastewater means any wastewater, also known as process water, not defined as domestic wastewater. Per 40 CFR Part 122, process water means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.
8. Mechanical treatment plants are wastewater treatment facilities that use mechanical devices to treat wastewater, including septic tanks, sand filters, extended aeration, activated sludge, contact stabilization, trickling filters, rotating biological discs, and other similar facilities. It does not include wastewater treatment lagoons and constructed wetlands for wastewater treatment.
9. Operating location as defined in 10 CSR 20-2.010 is all contiguous lands owned, operated or controlled by one (1) person or by two (2) or more persons jointly or as tenants in common.
10. Plant Available Nitrogen (PAN) is the nitrogen that will be available to plants during the growing seasons after biosolids application.
11. Public contact site is land with a high potential for contact by the public. This includes, but is not limited to, public parks, ball fields, cemeteries, plant nurseries, turf farms, and golf courses.
12. Sludge is the solid, semisolid, or liquid residue removed during the treatment of wastewater. Sludge includes septage removed from septic tanks or equivalent facilities. Sludge does not include carbon coal byproducts (CCBs)
13. Sludge lagoon is part of a mechanical wastewater treatment facility. A sludge lagoon is an earthen basin that receives sludge that has been removed from a wastewater treatment facility. It does not include a wastewater treatment lagoon or sludge treatment units that are not a part of a mechanical wastewater treatment facility.
14. Septage is the material pumped from residential septic tanks and similar treatment works (with a design population of less than 150 people). The standard for biosolids from septage is different from other sludges.

SECTION C – MECHANICAL WASTEWATER TREATMENT FACILITIES

1. Sludge shall be routinely removed from wastewater treatment facilities and handled according to the permit facility description and sludge conditions of this permit.
2. The permittee shall operate the facility so that there is no sludge discharged to waters of the state.
3. Mechanical treatment plants shall have separate sludge storage compartments in accordance with 10 CSR 20, Chapter 8. Failure to remove sludge from these storage compartments on the required design schedule is a violation of this permit.

SECTION D – SLUDGE DISPOSED AT OTHER TREATMENT FACILITY OR CONTRACT HAULER

1. This section applies to permittees that haul sludge to another treatment facility for disposal or use contract haulers to remove and dispose of sludge.
2. Permittees that use contract haulers are responsible for compliance with all the terms of this permit including final disposal, unless the hauler has a separate permit for sludge or biosolids disposal issued by the Department; or the hauler transports the sludge to another permitted treatment facility.
3. Haulers who land apply septage must obtain a state permit.
4. Testing of sludge, other than total solids content, is not required if sludge is hauled to a municipal wastewater treatment facility or other permitted wastewater treatment facility, unless it is required by the accepting facility.

SECTION E – INCINERATION OF SLUDGE

1. Sludge incineration facilities shall comply with the requirements of 40 CFR 503 Subpart E; air pollution control regulations under 10 CSR 10; and solid waste management regulations under 10 CSR 80.
2. Permittee may be authorized under the facility description of this permit to store incineration ash in lagoons or ash ponds. This permit does not authorize the disposal of incineration ash. Incineration ash shall be disposed in accordance with 10 CSR 80; or if the ash is determined to be hazardous with 10 CSR 25.
3. In addition to normal sludge monitoring, incineration facilities shall report the following as part of the annual report, quantity of sludge incinerated, quantity of ash generated, quantity of ash stored, and ash used or disposal method, quantity, and location. Permittee shall also provide the name of the disposal facility and the applicable permit number.

SECTION F – SURFACE DISPOSAL SITES AND SLUDGE LAGOONS

1. Surface disposal sites of domestic facilities shall comply with the requirements in 40 CFR 503 Subpart C; air pollution control regulations under 10 CSR 10; and solid waste management regulations under 10 CSR 80.
2. Sludge storage lagoons are temporary facilities and are not required to obtain a permit as a solid waste management facility under 10 CSR 80. In order to maintain sludge storage lagoons as storage facilities, accumulated sludge must be removed routinely, but not less than once every two years unless an alternate schedule is approved in the permit. The amount of sludge removed will be dependent on sludge generation and accumulation in the facility. Enough sludge must be removed to maintain adequate storage capacity in the facility.
 - a. In order to avoid damage to the lagoon seal during cleaning, the permittee may leave a layer of sludge on the bottom of the lagoon, upon prior approval of the Department; or
 - b. Permittee shall close the lagoon in accordance with Section H.

SECTION G – LAND APPLICATION

1. The permittee shall not land apply sludge or biosolids unless land application is authorized in the facility description or the special conditions of the issued NPDES permit.
2. Land application sites within a 20 miles radius of the wastewater treatment facility are authorized under this permit when biosolids are applied for beneficial use in accordance with these standard conditions unless otherwise specified in a site specific permit. If the permittee's land application site is greater than a 20 mile radius of the wastewater treatment facility, approval must be granted from the Department.
3. Land application shall not adversely affect a threatened or endangered species or its designated critical habitat.
4. Biosolids shall not be applied unless authorized in this permit or exempted under 10 CSR 20, Chapter 6.
 - a. This permit does not authorize the land application of domestic sludge except for when sludge meets the definition of biosolids.
 - b. This permit authorizes "Class A or B" biosolids derived from domestic wastewater and/or process water sludge to be land applied onto grass land, crop land, timber or other similar agricultural or silviculture lands at rates suitable for beneficial use as organic fertilizer and soil conditioner.
5. Public Contact Sites:

Permittees who wish to apply Class A biosolids to public contact sites must obtain approval from the Department after two years of proper operation with acceptable testing documentation that shows the biosolids meet Class A criteria. A shorter length of testing will be allowed with prior approval from the Department. Authorization for land applications must be provided in the special conditions section of this permit or in a separate site specific permit.

 - a. After Class B biosolids have been land applied, public access must be restricted for 12 months.
 - b. Class B biosolids are only land applied to root crops, home gardens or vegetable crops whose edible parts will not be for human consumption.
6. Agricultural and Silvicultural Sites:

Septage – Based on Water Quality guide 422 (WQ422) published by the University of Missouri

 - a. Haulers that land apply septage must obtain a state permit
 - b. Do not apply more than 30,000 gallons of septage per acre per year.
 - c. Septage tanks are designed to retain sludge for one to three years which will allow for a larger reduction in pathogens and vectors, as compared to other mechanical type treatment facilities.
 - d. To meet Class B sludge requirements, maintain septage at 12 pH for at least thirty (30) minutes before land application. 50 pounds of hydrated lime shall be added to each 1,000 gallons of septage in order to meet pathogen and vector stabilization for septage biosolids applied to crops, pastures or timberland.
 - e. Lime is to be added to the pump truck and not directly to the septic tanks, as lime would harm the beneficial bacteria of the septic tank.

Biosolids - Based on Water Quality guide 423, 424, and 425 (WQ423, WQ424, WQ425) published by the University of Missouri;

- a. Biosolids shall be monitored to determine the quality for regulated pollutants
- b. The number of samples taken is directly related to the amount of sludge produced by the facility (See Section I of these Standard Conditions). Report as dry weight unless otherwise specified in the site specific permit. Samples should be taken only during land application periods. When necessary, it is permissible to mix biosolids with lower concentrations of biosolids as well as other suitable Department approved material to reach the maximum concentration of pollutants allowed.
- c. Table 1 gives the maximum concentration allowable to protect water quality standards

TABLE 1

Biosolids ceiling concentration ¹	
Pollutant	Milligrams per kilogram dry weight
Arsenic	75
Cadmium	85
Copper	4,300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
Selenium	100
Zinc	7,500

¹ Land application is not allowed if the sludge concentration exceeds the maximum limits for any of these pollutants

- d. The low metal concentration biosolids has reduced requirements because of its higher quality and can safely be applied for 100 years or longer at typical agronomic loading rates. (See Table 2)

TABLE 2

Biosolids Low Metal Concentration ¹	
Pollutant	Milligrams per kilogram dry weight
Arsenic	41
Cadmium	39
Copper	1,500
Lead	300
Mercury	17
Nickel	420
Selenium	36
Zinc	2,800

¹ You may apply low metal biosolids without tracking cumulative metal limits, provided the cumulative application of biosolids does not exceed 500 dry tons per acre.

- e. Each pollutant in Table 3 has an annual and a total cumulative loading limit, based on the allowable pounds per acre for various soil categories.

TABLE 3

Pollutant	CEC 15+		CEC 5 to 15		CEC 0 to 5	
	Annual	Total ¹	Annual	Total ¹	Annual	Total ¹
Arsenic	1.8	36.0	1.8	36.0	1.8	36.0
Cadmium	1.7	35.0	0.9	9.0	0.4	4.5
Copper	66.0	1,335.0	25.0	250.0	12.0	125.0
Lead	13.0	267.0	13.0	267.0	13.0	133.0
Mercury	0.7	15.0	0.7	15.0	0.7	15.0
Nickel	19.0	347.0	19.0	250.0	12.0	125.0
Selenium	4.5	89.0	4.5	44.0	1.6	16.0
Zinc	124.0	2,492.0	50.0	500.0	25.0	250.0

¹ Total cumulative loading limits for soils with equal or greater than 6.0 pH (salt based test) or 6.5 pH (water based test)

TABLE 4 - Guidelines for land application of other trace substances ¹

Cumulative Loading	
Pollutant	Pounds per acre
Aluminum	4,000 ²
Beryllium	100
Cobalt	50
Fluoride	800
Manganese	500
Silver	200
Tin	1,000
Dioxin	(10 ppt in soil) ³
Other	⁴

¹ Design of land treatment systems for Industrial Waste, 1979. Michael Ray Overcash, North Carolina State University and Land Treatment of Municipal Wastewater, EPA 1981.)

² This applies for a soil with a pH between 6.0 and 7.0 (salt based test) or a pH between 6.5 to 7.5 (water based test). Case-by-case review is required for higher pH soils.

³ Total Dioxin Toxicity Equivalents (TEQ) in soils, based on a risk assessment under 40 CFR 744, May 1998.

⁴ Case by case review. Concentrations in sludge should not exceed the 95th percentile of the National Sewage Sludge Survey, EPA, January 2009.

Best Management Practices – Based on Water Quality guide 426 (WQ426) published by the University of Missouri

- a. Use best management practices when applying biosolids.
- b. Biosolids cannot discharge from the land application site
- c. Biosolid application is subject to the Missouri Department of Agriculture State Milk Board concerning grazing restrictions of lactating dairy cattle.
- d. Biosolid application must be in accordance with section 4 of the Endangered Species Act.
- e. Do not apply more than the agronomic rate of nitrogen needed.
- f. The applicator must document the Plant Available Nitrogen (PAN) loadings, available nitrogen in the soil, and crop removal when either of the following occurs: 1) When biosolids are greater than 50,000 mg/kg TN; or 2) When biosolids are land applied at an application rate greater than two dry tons per acre per year.
 - i. PAN can be determined as follows and is in accordance with WQ426
(Nitrate + nitrite nitrogen) + (organic nitrogen x 0.2) + (ammonia nitrogen x volatilization factor¹).
¹ Volatilization factor is 0.7 for surface application and 1 for subsurface application.
- g. Buffer zones are as follows:
 - i. 300 feet of a water supply well, sinkhole, lake, pond, water supply reservoir or water supply intake in a stream;
 - ii. 300 feet of a losing stream, no discharge stream, stream stretches designated for whole body contact recreation, wild and scenic rivers, Ozark National Scenic Riverways or outstanding state resource waters as listed in the Water Quality Standards, 10 CSR 20-7.031;
 - iii. 150 feet if dwellings;
 - iv. 100 feet of wetlands or permanent flowing streams;
 - v. 50 feet of a property line or other waters of the state, including intermittent flowing streams.
- h. Slope limitation for application sites are as follows;
 - i. A slope 0 to 6 percent has no rate limitation
 - ii. Applied to a slope 7 to 12 percent, the applicator may apply biosolids when soil conservation practices are used to meet the minimum erosion levels
 - iii. Slopes > 12 percent, apply biosolids only when grass is vegetated and maintained with at least 80 percent ground cover at a rate of two dry tons per acre per year or less.
- i. No biosolids may be land applied in an area that it is reasonably certain that pollutants will be transported into waters of the state.
- j. Do not apply biosolids to sites with soil that is snow covered, frozen or saturated with liquid without prior approval by the Department.
- k. Biosolids / sludge applicators must keep detailed records up to five years.

SECTION H – CLOSURE REQUIREMENTS

1. This section applies to all wastewater facilities (mechanical, industrial, and lagoons) and sludge or biosolids storage and treatment facilities and incineration ash ponds. It does not apply to land application sites.
2. Permittees of a domestic wastewater facility who plan to cease operation must obtain Department approval of a closure plan which addresses proper removal and disposal of all residues, including sludge, biosolids. Mechanical plants, sludge lagoons, ash ponds and other storage structures must obtain approval of a closure plan from the Department. Permittee must maintain this permit until the facility is closed in accordance with the approved closure plan per 10 CSR 20 – 6.010 and 10 CSR 20 – 6.015.
3. Residuals that are left in place during closure of a lagoon or earthen structure or ash pond shall not exceed the agricultural loading rates as follows:
 - a. Residuals shall meet the monitoring and land application limits for agricultural rates as referenced in Section H of these standard conditions.
 - b. If a wastewater treatment lagoon has been in operation for 15 years or more without sludge removal, the sludge in the lagoon qualifies as a Class B biosolids with respect to pathogens due to anaerobic digestion, and testing for fecal coliform is not required. For other lagoons, testing for fecal coliform is required to show compliance with Class B biosolids limitations. In order to reach Class B biosolids requirements, fecal coliform must be less than 2,000,000 colony forming units or 2,000,000 most probable number. All fecal samples must be presented as geometric mean per gram.
 - c. The allowable nitrogen loading that may be left in the lagoon shall be based on the plant available nitrogen (PAN) loading. For a grass cover crop, the allowable PAN is 300 pounds/acre.
 - i. PAN can be determined as follows:
$$(\text{Nitrate} + \text{nitrite nitrogen}) + (\text{organic nitrogen} \times 0.2) + (\text{ammonia nitrogen} \times \text{volatilization factor}^1).$$

¹ Volatilization factor is 0.7 for surface application and 1 for subsurface application.
4. When closing a domestic wastewater treatment lagoon with a design treatment capacity equal or less than 150 persons, the residuals are considered “septage” under the similar treatment works definition. See Section B of these standard conditions. Under the septage category, residuals may be left in place as follows:
 - a. Testing for metals or fecal coliform is not required
 - b. If the wastewater treatment lagoon has been in use for less than 15 years, mix lime with the sludge at a rate of 50 pounds of hydrated lime per 1000 gallons (134 cubic feet) of sludge.
 - c. The amount of sludge that may be left in the lagoon shall be based on the plant available nitrogen (PAN) loading. 100 dry tons/acre of sludge may be left in the basin without testing for nitrogen. If 100 dry tons/acre or more will be left in the lagoon, test for nitrogen and determine the PAN using the calculation above. Allowable PAN loading is 300 pounds/acre.
5. Residuals left within the domestic lagoon shall be mixed with soil on at least a 1 to 1 ratio, the lagoon berm shall be demolished, and the site shall be graded and contain $\geq 70\%$ vegetative density over 100% of the site so as to avoid ponding of storm water and provide adequate surface water drainage without creating erosion.
6. Lagoons and/or earthen structure and/or ash pond closure activities shall obtain a storm water permit for land disturbance activities that equal or exceed one acre in accordance with 10 CSR 20-6.200
7. When closing a mechanical wastewater and/or industrial process wastewater plant; all sludge must be cleaned out and disposed of in accordance with the Department approved closure plan before the permit for the facility can be terminated.
 - a. Land must be stabilized which includes any grading, alternate use or fate upon approval by the Department, remediation, or other work that exposes sediment to stormwater per 10 CSR 20-6.200. The site shall be graded and contain $\geq 70\%$ vegetative density over 100% of the site, so as to avoid ponding of storm water and provide adequate surface water drainage without creating erosion.
 - b. Per 10 CSR 20-6.015(4)(B)6, Hazardous Waste shall not be land applied or disposed during industrial and mechanical plant closures unless in accordance with Missouri Hazardous Waste Management Law and Regulations under 10 CSR 25.
 - c. After demolition of the mechanical plant / industrial plant, the site must only contain clean fill defined in RSMo 260.200 (5) as uncontaminated soil, rock, sand, gravel, concrete, asphaltic concrete, cinderblocks, brick, minimal amounts of wood and metal, and inert solids as approved by rule or policy of the Department for fill or other beneficial use. Other solid wastes must be removed.
8. If sludge from the domestic lagoon or mechanical treatment plant exceeds agricultural rates under Section G and/or H, a landfill permit or solid waste disposal permit must be obtained if the permittee chooses to seek authorization for on-site sludge disposal under the Missouri Solid Waste Management Law and regulations per 10 CSR 80, and the permittee must comply with the surface disposal requirements under 40 CFR 503, Subpart C.

SECTION I – MONITORING FREQUENCY

1. At a minimum, sludge or biosolids shall be tested for volume and percent total solids on a frequency that will accurately represent sludge quantities produced and disposed. Please see the table below.

TABLE 5

Design Sludge Production (dry tons per year)	Monitoring Frequency (See Notes 1, 2 and 3)			
	Metals, Pathogens and Vectors	Nitrogen TKN ¹	Nitrogen PAN ²	Priority Pollutants and TCLP ³
0 to 100	1 per year	1 per year	1 per month	1 per year
101 to 200	biannual	biannual	1 per month	1 per year
201 to 1,000	quarterly	quarterly	1 per month	1 per year
1,001 to 10,000	1 per month	1 per month	1 per week	-- ⁴
10,001 +	1 per week	1 per week	1 per day	-- ⁴

¹ Test total Kjeldahl nitrogen, if biosolids application is 2 dry tons per acre per year or less.

² Calculate plant available nitrogen (PAN) when either of the following occurs: 1) when biosolids are greater than 50,000 mg/kg TN; or 2) when biosolids are land applied at an application rate greater than two dry tons per acre per year.

³ Priority pollutants (40 CFR 122.21, Appendix D, Tables II and III) and toxicity characteristic leaching procedure (40 CFR 261.24) is required only for permit holders that must have a pre-treatment program.

⁴ One sample for each 1,000 dry tons of sludge.

Note 1: Total solids: A grab sample of sludge shall be tested one per day during land application periods for percent total solids.

This data shall be used to calculate the dry tons of sludge applied per acre.

Note 2: Total Phosphorus: Total phosphorus and total potassium shall be tested at the same monitoring frequency as metals.

Note 3: Table 5 is not applicable for incineration

2. If you own a wastewater treatment lagoon or sludge lagoon that is cleaned out once a year or less, you may choose to sample only when the sludge is removed or the lagoon is closed. Test one composite sample for each 100 dry tons of sludge or biosolids removed from the lagoon during the year within the lagoon at closing. Composite sample must represent various areas at one-foot depth.
3. Additional testing may be required in the special conditions or other sections of the permit. Permittees receiving industrial wastewater may be required to conduct additional testing upon request from the Department.
4. At this time, the Department recommends monitoring requirements shall be performed in accordance with, "POTW Sludge Sampling and Analysis Guidance Document," United States Environmental Protection Agency, August 1989, and the subsequent revisions.

SECTION J – RECORD KEEPING AND REPORTING REQUIREMENTS

1. The permittee shall maintain records on file at the facility for at least five years for the items listed in these standard conditions and any additional items in the Special Conditions section of this permit. This shall include dates when the sludge facility is checked for proper operation, records of maintenance and repairs and other relevant information.
2. Reporting period
 - a. By January 28th of each year, an annual report shall be submitted for the previous calendar year period for all mechanical wastewater treatment facilities, sludge lagoons, and sludge or biosolids disposal facilities.
 - b. Permittees with wastewater treatment lagoons shall submit the above annual report only when sludge or biosolids are removed from the lagoon during the report period or when the lagoon is closed.
3. Report Forms. The annual report shall be submitted on report forms provided by the Department or equivalent forms approved by the Department.
4. Reports shall be submitted as follows:

Major facilities (those serving 10,000 persons or 1 million gallons per day) shall report to both the Department and EPA. Other facilities need to report only to the Department. Reports shall be submitted to the addresses listed as follows:

DNR regional office listed in your permit
(see cover letter of permit)
ATTN: Sludge Coordinator

EPA Region VII
Water Compliance Branch (WACM)
Sludge Coordinator
11201 Renner Blvd.
Lenexa, KS 66219

5. Annual report contents. The annual report shall include the following:
- a. Sludge and biosolids testing performed. Include a copy or summary of all test results, even if not required by the permit.
 - b. Sludge or biosolids quantity shall be reported as dry tons for quantity generated by the wastewater treatment facility, the quantity stored on site at the end of the year, and the quantity used or disposed.
 - c. Gallons and % solids data used to calculate the dry ton amounts.
 - d. Description of any unusual operating conditions.
 - e. Final disposal method, dates, and location, and person responsible for hauling and disposal.
 - i. This must include the name, address for the hauler and sludge facility. If hauled to a municipal wastewater treatment facility, sanitary landfill, or other approved treatment facility, give the name of that facility.
 - ii. Include a description of the type of hauling equipment used and the capacity in tons, gallons, or cubic feet.
 - f. Contract Hauler Activities:

If contract hauler, provide a copy of a signed contract from the contractor. Permittee shall require the contractor to supply information required under this permit for which the contractor is responsible. The permittee shall submit a signed statement from the contractor that he has complied with the standards contained in this permit, unless the contract hauler has a separate sludge or biosolids use permit.
 - g. Land Application Sites:
 - i. Report the location of each application site, the annual and cumulative dry tons/acre for each site, and the landowners name and address. The location for each spreading site shall be given as a legal description for nearest ¼, ¼, Section, Township, Range, and county, or UTM coordinates. The facility shall report PAN when either of the following occurs: 1) When biosolids are greater than 50,000 mg/kg TN; or 2) when biosolids are land applied at an application rate greater than two dry tons per acre per year.
 - ii. If the "Low Metals" criteria are exceeded, report the annual and cumulative pollutant loading rates in pounds per acre for each applicable pollutant, and report the percent of cumulative pollutant loading which has been reached at each site.
 - iii. Report the method used for compliance with pathogen and vector attraction requirements.
 - iv. Report soil test results for pH, CEC, and phosphorus. If none was tested during the year, report the last date when tested and results.



College
of the Ozarks®

Environmental Health and Safety

RECEIVED

DEC 10 2013

P.O. Box 17
Point Lookout, MO 65726
www.cofo.edu

WATER PROTECTION PROGRAM

December 9, 2013

Missouri Department of Natural Resources
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102-0176

RE: National Pollutant Discharge Elimination System (NPDES) Permit

Dear Sir/Madam:

Please find enclosed Form A—Application For Operating Permit Under Missouri Clean Water Law for College of the Ozarks. Also enclosed are a location map and an additional page listing outfall information.

Please be aware that Outfalls 002 and 004 (swimming pool drainage and backwash) are now being discharged into the sanitary sewer system. We are requesting that the reporting requirements for these outfalls be removed from the NPDES Permit upon renewal.

Contact me with any further questions or comments.

Sincerely,

COLLEGE OF THE OZARKS

Roy Huston
Water Treatment Plant Supervisor
(417) 690-3273



Incorporated in 1906 as The School of the Ozarks to serve financially needy youth from the Ozarks region

RECEIVED

AP17148



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH
**FORM A – APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT
UNDER MISSOURI CLEAN WATER LAW**

FOR AGENCY USE ONLY

CHECK NUMBER

DATE RECEIVED

FEE SUBMITTED

12/9/13

088

Note ▶ PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM.

1. This application is for:

- ☐ An operating permit and antidegradation review public notice
☐ A construction permit following an appropriate operating permit and antidegradation review public notice
☐ A construction permit and concurrent operating permit and antidegradation review public notice
☐ A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required)
☐ An operating permit for a new or unpermitted facility Construction Permit # _____
☒ An operating permit renewal: permit # MO- 0089117 Expiration Date 06/11/2014
☐ An operating permit modification: permit # MO- Reason: _____

1.1 Is the appropriate fee included with the application? (See instructions for appropriate fee) ☐ YES ☒ NO

2. FACILITY

NAME College of the Ozarks		TELEPHONE WITH AREA CODE (417) 690-3273	
		FAX (417) 337-8254	
ADDRESS (PHYSICAL) 174 Industrial PI	CITY Point Lookout	STATE MO	ZIP CODE 65726

3. OWNER

NAME College of the Ozarks		E-MAIL ADDRESS rhuston@cofo.edu	TELEPHONE WITH AREA CODE (417) 690-3273
			FAX (417) 337-8254
ADDRESS (MAILING) P.O. Box 17	CITY Point Lookout	STATE MO	ZIP CODE 65726

3.1 Request review of draft permit prior to public notice? ☒ YES ☐ NO

4. CONTINUING AUTHORITY

NAME College of the Ozarks		TELEPHONE WITH AREA CODE (417) 690-3273	
		FAX (417) 337-8254	
ADDRESS (MAILING) P.O. Box 17	CITY Point Lookout	STATE MO	ZIP CODE 65726

5. OPERATOR

NAME Roy Huston	CERTIFICATE NUMBER 6135	TELEPHONE WITH AREA CODE (417) 690-3273
		FAX (417) 337-8254
ADDRESS (MAILING) P.O. Box 17	CITY Point Lookout	STATE MO
		ZIP CODE 65726

6. FACILITY CONTACT

NAME Roy Huston	TITLE Water Treatment Plant Supervisor	TELEPHONE WITH AREA CODE (417) 690-3273
		FAX (417) 337-8254

7. ADDITIONAL FACILITY INFORMATION

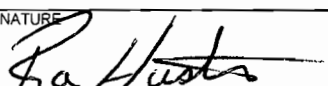
7.1 Legal Description of Outfalls. (Attach additional sheets if necessary.)

001 NW 1/4 SW 1/4 Sec 8 T 22W R 21W Taney County
 UTM Coordinates Easting (X): 3637051 Northing (Y): 09314145
 For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)
 002 NW 1/4 SW 1/4 Sec 8 T 22W R 21W Taney County
 UTM Coordinates Easting (X): 3637134 Northing (Y): 09314237
 003 NW 1/4 SW 1/4 Sec 8 T 22W R 21W Taney County
 UTM Coordinates Easting (X): no discharge Northing (Y): no discharge
 004 NW 1/4 SW 1/4 Sec 8 T 22W R 21W Taney County
 UTM Coordinates Easting (X): 3636464 Northing (Y): 09314199

7.2 Primary Standard Industrial Classification (SIC) and Facility North American Industrial Classification System (NAICS) Codes.

001 – SIC 8221 and NAICS 611310 002 – SIC _____ and NAICS _____
 003 – SIC _____ and NAICS _____ 004 – SIC _____ and NAICS _____

SW
Taney

8. ADDITIONAL FORMS AND MAPS NECESSARY TO COMPLETE THIS APPLICATION (Complete all forms that are applicable.)			
A.	Is your facility a manufacturing, commercial, mining or silviculture waste treatment facility? If yes, complete Form C (unless storm water only, then complete U.S. Environmental Protection Agency Form 2F per Item C below).	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
B.	Is your facility considered a "Primary Industry" under EPA guidelines: If yes, complete Forms C and D.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
C.	Is application for storm water discharges only? If yes, complete EPA Form 2F.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
D.	Attach a map showing all outfalls and the receiving stream at 1" = 2,000' scale.		
E.	Is wastewater land applied? If yes, complete Form I.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
F.	Is sludge, biosolids, ash or residuals generated, treated, stored or land applied? If yes, complete Form R.	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
9. DOWNSTREAM LANDOWNER(S) Attach additional sheets as necessary. See Instructions. (PLEASE SHOW LOCATION ON MAP. SEE 8.D ABOVE).			
NAME Dr. Howell Keeter			
ADDRESS 380 Shockley Rd		CITY Hollister	STATE MO
		ZIP CODE 65672	
10. I certify that I am familiar with the information contained in the application, that to the best of my knowledge and belief such information is true, complete and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions, subject to any legitimate appeal available to applicant under the Missouri Clean Water Law to the Missouri Clean Water Commission.			
NAME AND OFFICIAL TITLE (TYPE OR PRINT) Roy Huston, Water Treatment Plant Supervisor			TELEPHONE WITH AREA CODE (417) 690-3273
SIGNATURE 			DATE SIGNED 12/09/2013

MO 780-14794(1-09)

BEFORE MAILING, PLEASE ENSURE ALL SECTIONS ARE COMPLETED AND ADDITIONAL FORMS, IF APPLICABLE, ARE INCLUDED.

Submittal of an incomplete application may result in the application being returned.

HAVE YOU INCLUDED:

- | | |
|--|--|
| <input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/> | Appropriate Fees?
Map at 1" = 2000' scale?
Signature?
Form C, if applicable?
Form D, if applicable?
Form 2F, if applicable?
Form I (Irrigation), if applicable?
Form R (Sludge), if applicable? |
|--|--|

MISSOURI DEPARTMENT OF NATURAL RESOURCES

WATER PROTECTION PROGRAM, WATER POLLUTION CONTROL BRANCH

**FORM A--APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT
UNDER MISSOURI CLEAN WATER LAW**

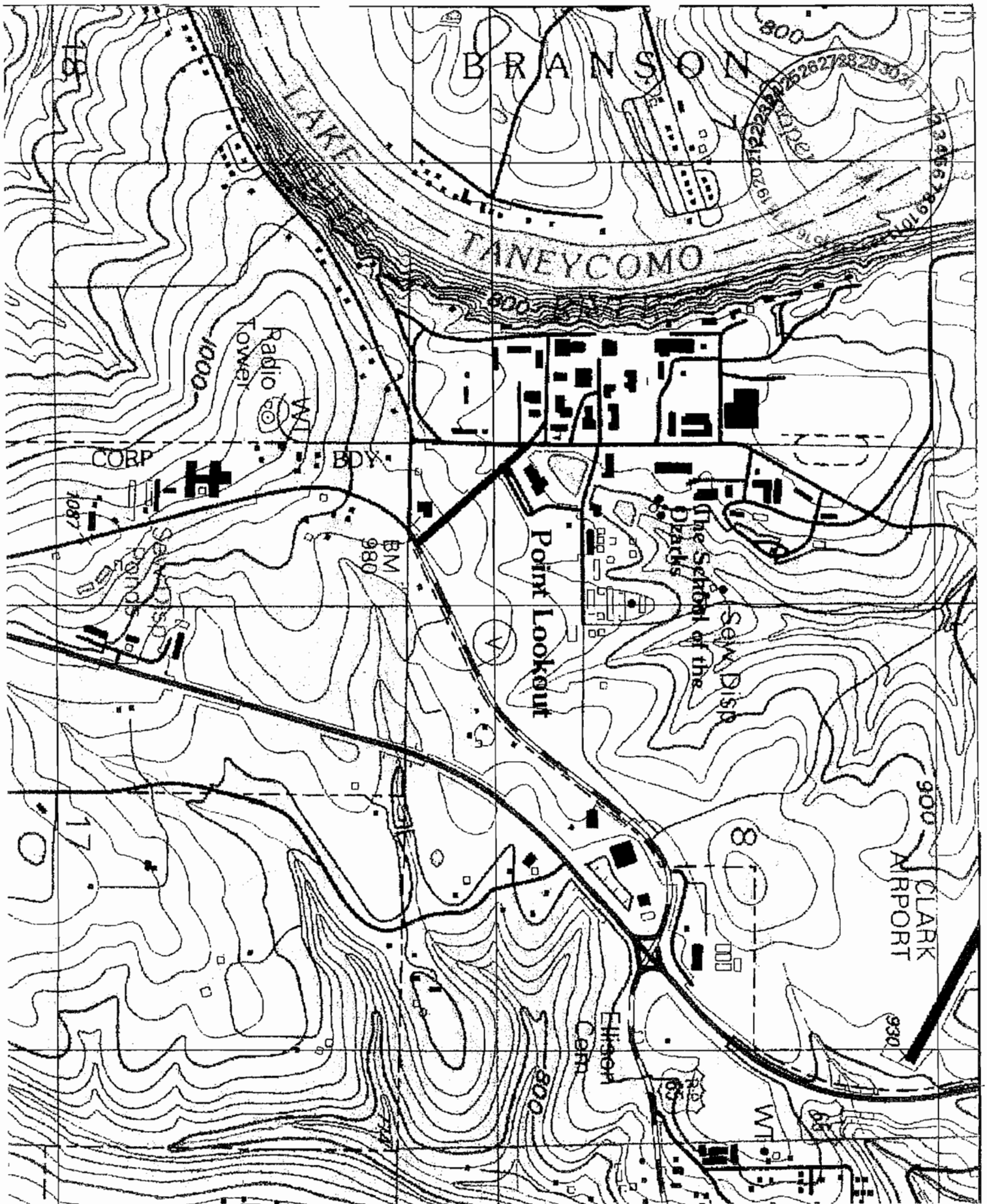
FACILITY NAME: College of the Ozarks

PERMIT NUMBER: MO0089117

7. ADDITIONAL FACILITY INFORMATION

7.1 Legal Description of Outfalls.

005	NW¼	SW¼	Sec 8	T22W	R21W	Taney County
UTM Coordinates Easting (X): 3637053 Northing (Y): 09314155						
<i>For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)</i>						
006	NW¼	SW¼	Sec 8	T22W	R21W	Taney County
UTM Coordinates Easting (X): 3637084 Northing (Y): 09314314						
007	NW¼	SW¼	Sec 8	T22W	R21W	Taney County
UTM Coordinates Easting (X): 3637050 Northing (Y): 09314309						
008	NW¼	SW¼	Sec 8	T22W	R21W	Taney County
UTM Coordinates Easting (X): 3637134 Northing (Y): 09314237						





College
of the Ozarks

P.O. Box 17
Point Lookout, MO 65726
www.cofo.edu

February 11, 2014

Missouri Department of Natural Resources
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102-0176

RE: National Pollutant Discharge Elimination System (NPDES) Permit

Dear Sir/Madam:

In December of 2013 College of the Ozarks submitted Form A and we were informed that Form C was also necessary to renew our permit. Please find it enclosed.

Please note outfall #006 Ammonia levels were high and we believe that these levels were high because we had to perform a forced discharge on this outfall. We believe that this does not represent the characteristics of normal operation.

Please contact me with any other questions or comments.

Sincerely,

COLLEGE OF THE OZARKS

Roy Huston
Water Treatment Plant Supervisor
(417) 690-3273

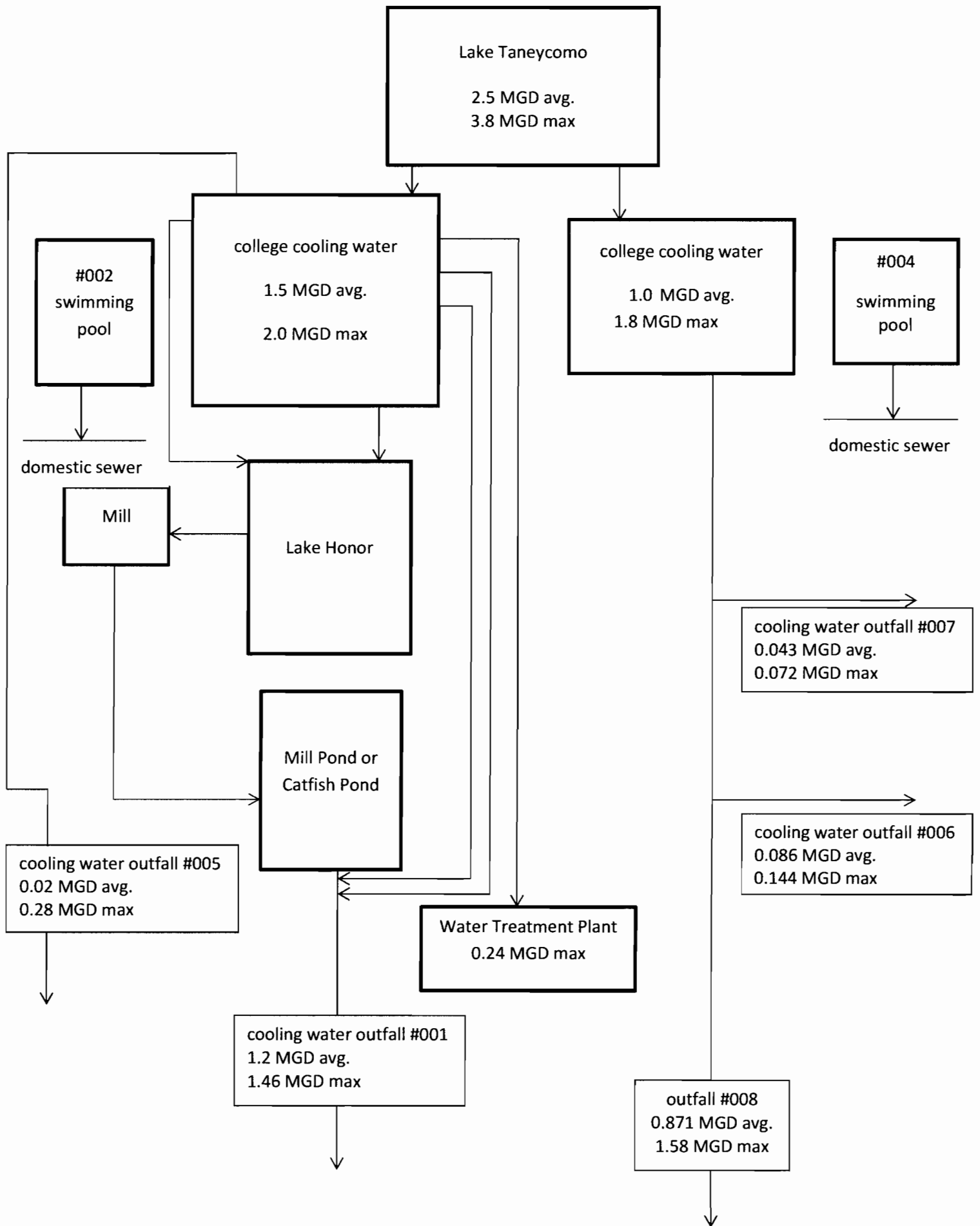
2/11/2014

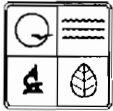
11:41 AM

WATER PROTECTION PROGRAM



Incorporated in 1906 as The School of the Ozarks to serve financially needy youth from the Ozarks region





MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH
FORM C – APPLICATION FOR DISCHARGE PERMIT –
MANUFACTURING, COMMERCIAL, MINING,
SILVICULTURE OPERATIONS, PROCESS AND STORMWATER

FOR AGENCY USE ONLY

CHECK NO.

DATE RECEIVED

FEE SUBMITTED

NOTE: DO NOT ATTEMPT TO COMPLETE THIS FORM BEFORE READING THE ACCOMPANYING INSTRUCTIONS

1.00 NAME OF FACILITY

College of the Ozarks

1.10 THIS FACILITY IS NOW IN OPERATION UNDER MISSOURI OPERATING PERMIT NUMBER

MO-0089117

1.20 THIS IS A NEW FACILITY AND WAS CONSTRUCTED UNDER MISSOURI CONSTRUCTION PERMIT NUMBER (COMPLETE ONLY IF THIS FACILITY DOES NOT HAVE AN OPERATING PERMIT).

2.00 LIST THE STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES APPLICABLE TO YOUR FACILITY (FOUR DIGIT CODE)

A. FIRST 8221 B. SECOND
C. THIRD D. FOURTH

2.10 FOR EACH OUTFALL GIVE THE LEGAL DESCRIPTION.

OUTFALL NUMBER (LIST) NW 1/4 SW 1/4 SEC 8 T 22N R 21W Taney COUNTY

2.20 FOR EACH OUTFALL LIST THE NAME OF THE RECEIVING WATER

OUTFALL NUMBER (LIST)
#001, #003, #004, #005, #006, #007, #008

RECEIVING WATER
All unnamed tributaries to Lake Taneycomo.

2.30 BRIEFLY DESCRIBE THE NATURE OF YOUR BUSINESS

4-yr. liberal arts college

B. For each outfall, provide a description of 1. All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water and storm water runoff. 2. The average flow contributed by each operation. 3. The treatment received by the wastewater. Continue on additional sheets if necessary.

[illegible]

2.40 CONTINUED

C. EXCEPT FOR STORM RUNOFF, LEAKS OR SPILLS, ARE ANY OF THE DISCHARGES DESCRIBED IN ITEMS A OR B INTERMITTENT OR SEASONAL?

☐ YES (COMPLETE THE FOLLOWING TABLE)

☒ NO (GO TO SECTION 2.50)

1. OUTFALL NUMBER <i>(list)</i>	2. OPERATION(S) CONTRIBUTING FLOW <i>(list)</i>	3. FREQUENCY		4. FLOW				C. DURATION <i>(in days)</i>
				A. FLOW RATE <i>(in mgd)</i>		B. TOTAL VOLUME (specify with units)		
		A. DAYS PER WEEK <i>(specify average)</i>	B. MONTHS PER YEAR <i>(specify average)</i>	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	4. LONG TERM DAILY	3. MAXIMUM AVERAGE	
#001 #002 #003 #004 #005 #006 #007 #008	cooling water is continuous effluent discharge to sewer system no discharge effluent discharge to sewer system cooling water is continuous cooling water is seasonal cooling water is seasonal cooling water is continuous	7 7 7 7 7	12 12 8 8 12					

2.50 MAXIMUM PRODUCTION

A. DOES AN EFFLUENT GUIDELINE LIMITATION PROMULGATED BY EPA UNDER SECTION 304 OF THE CLEAN WATER ACT APPLY TO YOUR FACILITY?

☐ YES (COMPLETE B.)

☒ NO (GO TO SECTION 2.60)

B. ARE THE LIMITATIONS IN THE APPLICABLE EFFLUENT GUIDELINES EXPRESSED IN TERMS OF PRODUCTION (OF OTHER MEASURE OF OPERATION)?

☐ YES (COMPLETE C.)

☐ NO (GO TO SECTION 2.60)

C. IF YOU ANSWERED "YES" TO B. LIST THE QUANTITY THAT REPRESENTS AN ACTUAL MEASUREMENT OF YOUR MAXIMUM LEVEL OF PRODUCTION, EXPRESSED IN THE TERMS AND UNITS USED IN THE APPLICABLE EFFLUENT GUIDELINE AND INDICATE THE AFFECTED OUTFALLS.

1. MAXIMUM QUANTITY			2. AFFECTED OUTFALLS (list outfall numbers)
A. QUANTITY PER DAY	B. UNITS OF MEASURE	C. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	

2.60 IMPROVEMENTS

A. ARE YOU NOW REQUIRED BY ANY FEDERAL, STATE OR LOCAL AUTHORITY TO MEET, ANY IMPLEMENTATION SCHEDULE FOR THE CONSTRUCTION, UPGRADING OR OPERATION OF WASTEWATER TREATMENT EQUIPMENT OR PRACTICES OR ANY OTHER ENVIRONMENTAL PROGRAMS THAT MAY AFFECT THE DISCHARGES DESCRIBED IN THIS APPLICATION? THIS INCLUDES, BUT IS NOT LIMITED TO, PERMIT CONDITIONS, ADMINISTRATIVE OR ENFORCEMENT ORDERS, ENFORCEMENT COMPLIANCE SCHEDULE LETTERS, STIPULATIONS, COURT ORDERS AND GRANT OR LOAN CONDITIONS.

☐ YES (COMPLETE THE FOLLOWING TABLE)

☒ NO (GO TO 3.00)

1. IDENTIFICATION OF CONDITION AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
				A. REQUIRED	B. PROJECTED

B. OPTIONAL: YOU MAY ATTACH ADDITIONAL SHEETS DESCRIBING ANY ADDITIONAL WATER POLLUTION CONTROL PROGRAMS (OR OTHER ENVIRONMENTAL PROJECTS WHICH MAY AFFECT YOUR DISCHARGES) YOU NOW HAVE UNDER WAY OR WHICH YOU PLAN. INDICATE WHETHER EACH PROGRAM IS NOW UNDER WAY OR PLANNED, AND INDICATE YOUR ACTUAL OR PLANNED SCHEDULES FOR CONSTRUCTION.

☐ MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED.

3.00 INTAKE AND EFFLUENT CHARACTERISTICS

A. & B. SEE INSTRUCTIONS BEFORE PROCEEDING – COMPLETE ONE TABLE FOR EACH OUTFALL – ANNOTATE THE OUTFALL NUMBER IN THE SPACE PROVIDED.
NOTE: TABLE 1 IS INCLUDED ON SEPARATE SHEETS NUMBERED FROM PAGE 6 TO PAGE 7.

C. USE THE SPACE BELOW TO LIST ANY OF THE POLLUTANTS LISTED IN PART B OF THE INSTRUCTIONS, WHICH YOU KNOW OR HAVE REASON TO BELIEVE IS DISCHARGED OR MAY BE DISCHARGED FROM ANY OUTFALL. FOR EVERY POLLUTANT YOU LIST, BRIEFLY DESCRIBE THE REASONS YOU BELIEVE IT TO BE PRESENT AND REPORT ANY ANALYTICAL DATA IN YOUR POSSESSION.

[illegible]

3.10 BIOLOGICAL TOXICITY TESTING DATA

DO YOU HAVE ANY KNOWLEDGE OR REASON TO BELIEVE THAT ANY BIOLOGICAL TEST FOR ACUTE OR CHRONIC TOXICITY HAS BEEN MADE ON ANY OF YOUR DISCHARGES OR ON RECEIVING WATER IN RELATION TO YOUR DISCHARGE WITHIN THE LAST THREE YEARS?

☐ YES (IDENTIFY THE TEST(S) AND DESCRIBE THEIR PURPOSES BELOW.) ☒ NO (GO TO 3.20)

3.20 CONTRACT ANALYSIS INFORMATION

WERE ANY OF THE ANALYSES REPORTED PERFORMED BY A CONTRACT LABORATORY OR CONSULTING FIRM?

☒ YES (LIST THE NAME, ADDRESS AND TELEPHONE NUMBER OF AND POLLUTANTS ANALYZED BY EACH SUCH LABORATORY OR FIRM BELOW.) ☐ NO (GO TO 3.30)

A. NAME	B. ADDRESS	C. TELEPHONE (area code and number)	D. POLLUTANTS ANALYZED (list)
Consulting Analytical Services International Incorporated	2804 East Battlefield Rd. Springfield, MO 65804	417-882-1017	Biochemical Oxygen Demand Oil and grease Phosphorus Total Suspended Solids

3.30 CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS APPLICATION AND ALL ATTACHMENTS AND THAT, BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THAT THE INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

NAME AND OFFICIAL TITLE (TYPE OR PRINT)

Roy Huston, Water Treatment Plant Chief Operator

TELEPHONE NUMBER WITH AREA CODE

(417) 690-3273

SIGNATURE (SEE INSTRUCTIONS)



DATE SIGNED

2-11-14

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet
(Use the same format) instead of completing these pages.
SEE INSTRUCTIONS

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS												OUTFALL NO. #001
PART A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.												
1. POLLUTANT	2. EFFLUENT				3. UNITS (specify if blank)				4. INTAKE (optional)		B. NO. OF ANALYSES	
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION		(2) MASS
A. Biochemical Oxygen Demand (BOD)	<2mg/L	24lbs			<2mg/L	20lbs	6					
B. Chemical Oxygen Demand (COD)	<10mg/L	122lbs			<10mg/L	100lbs	1					
C. Total organic Carbon (TOC)	2.4mg/L	29lbs			2.4mg/L	24lbs	1					
D. Total Suspended Solids (TSS)	2.0mg/L	24lbs			2.0mg/L	20lbs	6					
E. Ammonia (as N)	0.2mg/L	2.43lbs			0.2mg/L	2.0lbs	1					
F. Flow	VALUE 1.46MGD		VALUE		VALUE 1.2MGD		avg.				VALUE	
G. Temperature (winter)	VALUE 10 degrees C		VALUE		VALUE 10 degrees C			°C			VALUE	
H. Temperature (summer)	VALUE 15 degrees C		VALUE		VALUE 13.8 degrees C		avg.	°C			VALUE	
I. pH	MINIMUM 6.6	MAXIMUM 7.6	MINIMUM	MAXIMUM			6	STANDARD UNITS				

PART B – Mark "X" in column 2A for each pollutant you know or have reason to believe is present. Mark "X" in column 2B for each pollutant you believe to be absent. If you mark column 2A for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT				4. UNITS		5. INTAKE (optional)		B. NO. OF ANALYSES	
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE (1) CONCENTRATION	B. MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION	C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN-TRATION	B. MASS	A. LONG TERM AVRG. VALUE		
					(2) MASS	(1) CONCENTRATION				(2) MASS		(1) CONCENTRATION
CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS												
A. Bromide (24959-67-9)		X										
B. Chlorine, Total Residual		X										
C. Color		X										
D. Fecal Coliform		X										
E. Fluoride (16984-48-8)		X										
F. Nitrate - Nitrate (as N)		X										

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen, Total Organic (as N)		X												
H. Oil and Grease	X		5.5 mg/L	67 lbs			5.5 mg/L	556 lbs						
I. Phosphorus (as P), Total (7723-14-0)	X		< 0.05 mg/L	0.61 lbs			0.05 mg/L	0.50 lbs						
J. Sulfate (as SO ₄) (14808-79-8)		X												
K. Sulfide (as S)		X												
L. Sulfite (as SO ₃) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum, Total (7429-90-5)		X												
O. Barium, Total (7440-39-3)		X												
P. Boron, Total (7440-42-8)		X												
Q. Cobalt, Total (7440-48-4)		X												
R. Iron, Total (7439-89-6)		X												
S. Magnesium, Total (7439-95-4)		X												
T. Molybdenum, Total (7439-98-7)		X												
U. Manganese, Total (7439-96-5)		X												
V. Tin, Total (7440-31-5)		X												
W. Titanium, Total (7440-32-6)		X												
MO 780-1514 (06-13)														

PAGE 7

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE		C. LONG TERM AVRG. VALUE		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
METALS, AND TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)		X												
2M. Arsenic, Total (7440-38-2)		X												
3M. Beryllium, Total (7440-41-7)		X												
4M. Cadmium, Total (7440-43-9)		X												
5M. Chromium III (16065-83-1)		X												
6M. Chromium VI (18540-29-9)		X												
7M. Copper, Total (7440-50-8)		X												
8M. Lead, Total (7439-92-1)		X												
9M. Mercury, Total (7439-97-6)		X												
10M. Nickel, Total (7440-02-0)		X												
11M. Selenium, Total (7782-49-2)		X												
12M. Silver, Total (7440-22-4)		X												
13M. Thallium, Total (7440-28-0)		X												
14M. Zinc, Total (7440-66-6)		X												
15M. Cyanide, Amenable to Chlorination		X												
16M. Phenols, Total		X												
RADIOACTIVITY														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet
(Use the same format) instead of completing these pages.
SEE INSTRUCTIONS

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.
#005

PART A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT										3. UNITS (Specify if blank)		4. INTAKE (optional)	
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES		
	CONCENTRATION (1)	(2) MASS	CONCENTRATION (1)	(2) MASS	CONCENTRATION (1)	(2) MASS				(1) CONCENTRATION	(2) MASS			
A. Biochemical Oxygen Demand (BOD)	<2mg/L	4.7lbs			<2mg/L	0.33lbs	6							
B. Chemical Oxygen Demand (COD)	<10mg/L	<23.4lbs			<10mg/L	<1.7lbs	1							
C. Total organic Carbon (TOC)	2.0mg/L	4.7lbs			2.0mg/L	0.33lbs	1							
D. Total Suspended Solids (TSS)	7.0mg/L	16.3lbs			2.8mg/L	0.47lbs	6							
E. Ammonia (as N)	0.1mg/L	0.23lbs			0.2mg/L	0.03lbs	1							
F. Flow	VALUE 0.28MGD				VALUE 0.02MGD		avg.			VALUE				
G. Temperature (winter)	VALUE 11 degrees C				VALUE			°C		VALUE				
H. Temperature (summer)	VALUE 16 degrees C				VALUE 14.5 degrees C		avg.	°C		VALUE				
I. pH	MINIMUM 6.6	MAXIMUM 7.6					7	STANDARD UNITS						

PART B – Mark "X" in column 2A for each pollutant you know or have reason to believe is present. Mark "X" in column 2B for each pollutant you believe to be absent. If you mark column 2A for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE (1)		B. MAXIMUM 30 DAY VALUE (1)		C. LONG TERM AVRG. VALUE (1)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			CONCENTRATION	(2) MASS	CONCENTRATION	(2) MASS	CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Bromide (24959-67-9)		X												
B. Chlorine, Total Residual		X												
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)		X												
F. Nitrate - Nitrate (as N)		X												

MO 780-1514 (06-13)

PAGE 6

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES	
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
G. Nitrogen, Total Organic (as N)		X													
H. Oil and Grease	X		5.5mg/L	12.8lbs			5.5mg/L	0.92lbs							
I. Phosphorus (as P), Total (7723-14-0)	X		<0.05mg/L	0.12lbs			0.05mg/L	0.008lb							
J. Sulfate (as SO ₄) (14808-79-8)		X													
K. Sulfide (as S)		X													
L. Sulfite (as SO ₃) (14265-45-3)		X													
M. Surfactants		X													
N. Aluminum, Total (7429-90-5)		X													
O. Barium, Total (7440-39-3)		X													
P. Boron, Total (7440-42-8)		X													
Q. Cobalt, Total (7440-48-4)		X													
R. Iron, Total (7439-89-6)		X													
S. Magnesium, Total (7439-95-4)		X													
T. Molybdenum, Total (7439-98-7)		X													
U. Manganese, Total (7439-96-5)		X													
V. Tin, Total (7440-31-5)		X													
W. Titanium, Total (7440-32-6)		X													

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)		X												
2M. Arsenic, Total (7440-38-2)		X												
3M. Beryllium, Total (7440-41-7)		X												
4M. Cadmium, Total (7440-43-9)		X												
5M. Chromium III (16065-83-1)		X												
6M. Chromium VI (18540-29-9)		X												
7M. Copper, Total (7440-50-8)		X												
8M. Lead, Total (7439-92-1)		X												
9M. Mercury, Total (7439-97-6)		X												
10M. Nickel, Total (7440-02-0)		X												
11M. Selenium, Total (7782-49-2)		X												
12M. Silver, Total (7440-22-4)		X												
13M. Thallium, Total (7440-28-0)		X												
14M. Zinc, Total (7440-66-6)		X												
15M. Cyanide, Amenable to Chlorination		X												
16M. Phenols, Total		X												
RADIOACTIVITY														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet
(Use the same format) instead of completing these pages.
SEE INSTRUCTIONS

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.
#006

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT								3. UNITS (specify if blank)		4. INTAKE (optional)		
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE <i>(if available)</i>		C. LONG TERM AVRG. VALUE <i>(if available)</i>		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES	
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
A. Biochemical Oxygen Demand (BOD)	<2mg/L	7.3lbs			<2mg/L	1.43lbs	6						
B. Chemical Oxygen Demand (COD)	<10mg/L	12lbs			<10mg/L	7.2lbs	1						
C. Total organic Carbon (TOC)	2.1mg/L	2.5lbs			2.1mg/L	1.5lbs	1						
D. Total Suspended Solids (TSS)	1.67mg/L	2.0lbs			1.67mg/L	1.2lbs	6						
E. Ammonia (as N)	7.6mg/L	9.1lbs			7.6mg/L	5.5lbs	1						
F. Flow	VALUE 0.144MGD		VALUE		VALUE 0.086MGD		avg.			VALUE			
G. Temperature (winter)	VALUE 11 degrees C		VALUE		VALUE				°C	VALUE			
H. Temperature (summer)	VALUE 15 degrees C		VALUE		VALUE 13.3 degrees C		avg.		°C	VALUE			
I. pH	MINIMUM 6.7	MAXIMUM 7.7	MINIMUM	MAXIMUM			7	STANDARD UNITS					

PART B - Mark 'X' in column 2A for each pollutant you know or have reason to believe is present. Mark 'X' in column 2B for each pollutant you believe to be absent. If you mark column 2A for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)	
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE (1)		B. MAXIMUM 30 DAY VALUE (1)		C. LONG TERM AVRG. VALUE (1)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	B. NO. OF ANALYSES
			CONCENTRATION	(2) MASS	CONCENTRATION	(2) MASS	CONCENTRATION	(2) MASS				
A. Bromide (24959-67-9)	X											
B. Chlorine, Total Residual	X											
C. Color	X											
D. Fecal Coliform	X											
E. Fluoride (16984-48-8)	X											
F. Nitrate - Nitrate (as N)	X											

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS			5. INTAKE (optional)		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen, Total Organic (as N)		X												
H. Oil and Grease	X		5.5mg/L	6.6lbs			5.5mg/L	3.9lbs						
I. Phosphorus (as P), Total (7723-14-0)	X		0.05mg/L	0.06lbs			0.05mg/L	0.04lbs						
J. Sulfate (as SO ₄) (14808-79-8)		X												
K. Sulfide (as S)		X												
L. Sulfite (as SO ₃) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum, Total (7429-90-5)		X												
O. Barium, Total (7440-39-3)		X												
P. Boron, Total (7440-42-8)		X												
Q. Cobalt, Total (7440-48-4)		X												
R. Iron, Total (7439-89-6)		X												
S. Magnesium, Total (7439-95-4)		X												
T. Molybdenum, Total (7439-98-7)		X												
U. Manganese, Total (7439-96-5)		X												
V. Tin, Total (7440-31-5)		X												
W. Titanium, Total (7440-32-6)		X												

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)		X												
2M. Arsenic, Total (7440-38-2)		X												
3M. Beryllium, Total (7440-41-7)		X												
4M. Cadmium, Total (7440-43-9)		X												
5M. Chromium III (16065-83-1)		X												
6M. Chromium VI (18540-29-9)		X												
7M. Copper, Total (7440-50-8)		X												
8M. Lead, Total (7439-92-1)		X												
9M. Mercury, Total (7439-97-6)		X												
10M. Nickel, Total (7440-02-0)		X												
11M. Selenium, Total (7782-49-2)		X												
12M. Silver, Total (7440-22-4)		X												
13M. Thallium, Total (7440-28-0)		X												
14M. Zinc, Total (7440-66-6)		X												
15M. Cyanide, Amenable to Chlorination		X												
16M. Phenols, Total		X												
RADIOACTIVITY														
(1) Alpha Total		X												
(2) Beta Total		X												
(3) Radium Total		X												
(4) Radium 226 Total		X												

MO 780-1514 (05-13)

PAGE 8

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet
(Use the same format) instead of completing these pages.
SEE INSTRUCTIONS

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.
#007

PART A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT							3. UNITS (specify if blank)		4. INTAKE (optional)		
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Biochemical Oxygen Demand (BOD)	<2mg/L	1.2lbs			<2mg/L	0.72lbs	6					
B. Chemical Oxygen Demand (COD)	<10mg/L	6.0lbs			<10mg/L	3.6lbs	1					
C. Total organic Carbon (TOC)	2.1mg/L	1.3lbs			2.1mg/L	0.75lbs	1					
D. Total Suspended Solids (TSS)	1.67mg/L	1.0lbs			1.67mg/L	0.60lbs	6					
E. Ammonia (as N)	0.2mg/L	0.12lbs			0.2mg/L	0.07lbs	1					
F. Flow	VALUE 0.072MGD		VALUE		VALUE 0.043MGD		avg.			VALUE		
G. Temperature (winter)	VALUE 10 degrees C		VALUE		VALUE				°C	VALUE		
H. Temperature (summer)	VALUE 15 degrees C		VALUE		VALUE 13.2 degrees C		avg.		°C	VALUE		
I. pH	MINIMUM 6.8	MAXIMUM 7.8	MINIMUM	MAXIMUM			7	STANDARD UNITS				

PART B – Mark 'X' in column 2A for each pollutant you know or have reason to believe is present. Mark 'X' in column 2B for each pollutant you believe to be absent. If you mark column 2A for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS														
A. Bromide (24959-67-9)	X													
B. Chlorine, Total Residual	X													
C. Color	X													
D. Fecal Coliform	X													
E. Fluoride (16984-48-8)	X													
F. Nitrate - Nitrate (as N)	X													

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE <i>(optional)</i>			B. NO. OF ANALYSES	
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE <i>(if available)</i>		C. LONG TERM AVRG. VALUE <i>(if available)</i>		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE			
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
G. Nitrogen, Total Organic <i>(as N)</i>		X													
H. Oil and Grease	X		5.4mg/L	3.2lbs			5.4mg/L	1.9lbs							
I. Phosphorus <i>(as P)</i> , Total (7723-14-0)	X		<0.05mg/L	0.03lbs			<0.05mg/L	0.02lbs							
J. Sulfate <i>(as SO⁴)</i> (14808-79-8)		X													
K. Sulfide <i>(as S)</i>		X													
L. Sulfite <i>(as SO³)</i> (14265-45-3)		X													
M. Surfactants		X													
N. Aluminum, Total (7429-90-5)		X													
O. Barium, Total (7440-39-3)		X													
P. Boron, Total (7440-42-8)		X													
Q. Cobalt, Total (7440-48-4)		X													
R. Iron, Total (7439-89-6)		X													
S. Magnesium, Total (7439-95-4)		X													
T. Molybdenum, Total (7439-98-7)		X													
U. Manganese, Total (7439-96-5)		X													
V. Tin, Total (7440-31-5)		X													
W. Titanium, Total (7440-32-6)		X													

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE <i>(optional)</i>		
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE (1) CONCENTRATION	B. MAXIMUM 30 DAY VALUE <i>(if available)</i>		C. LONG TERM AVRG. VALUE <i>(if available)</i>		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, AND TOTAL PHENOLS													
1M. Antimony, Total (7440-36-9)		X											
2M. Arsenic, Total (7440-38-2)		X											
3M. Beryllium, Total (7440-41-7)		X											
4M. Cadmium, Total (7440-43-9)		X											
5M. Chromium III (16065-83-1)		X											
6M. Chromium VI (18540-29-9)		X											
7M. Copper, Total (7440-50-8)		X											
8M. Lead, Total (7439-92-1)		X											
9M. Mercury, Total (7439-97-6)		X											
10M. Nickel, Total (7440-02-0)		X											
11M. Selenium, Total (7782-49-2)		X											
12M. Silver, Total (7440-22-4)		X											
13M. Thallium, Total (7440-28-0)		X											
14M. Zinc, Total (7440-66-6)		X											
15M. Cyanide, Amenable to Chlorination		X											
16M. Phenols, Total		X											
RADIOACTIVITY													
(1) Alpha Total		X											
(2) Beta Total		X											
(3) Radium Total		X											
(4) Radium 226 Total		X											

PLEASE PRINT OR TYPE. You may report some or all of this information on separate sheet
(Use the same format) instead of completing these pages.
SEE INSTRUCTIONS

FORM C
TABLE 1 FOR 3.00 ITEM A AND B

INTAKE AND EFFLUENT CHARACTERISTICS

OUTFALL NO.
#008

PART A – You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT								3. UNITS (specify if blank)		4. INTAKE (optional)	
	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE <i>(if available)</i>		C. LONG TERM AVRG. VALUE <i>(if available)</i>		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
A. Biochemical Oxygen Demand (BOD)	<2mg/L	26.4lbs			<2mg/L	14.5lbs	6					
B. Chemical Oxygen Demand (COD)	<10mg/L	131.8lbs			<10mg/L	72.6lbs	1					
C. Total organic Carbon (TOC)	2.1mg/L	27.7lbs			2.1mg/L	15.3lbs	1					
D. Total Suspended Solids (TSS)	1.5mg/L	19.8lbs			1.5mg/L	10.9lbs	6					
E. Ammonia (as N)	0.1mg/L	1.3lbs			0.1mg/L	0.73lbs	1					
F. Flow	VALUE 1.58MGD		VALUE		VALUE 0.871MGD		avg.			VALUE		
G. Temperature (winter)	VALUE 11 degrees C		VALUE		VALUE				°C	VALUE		
H. Temperature (summer)	VALUE 16 degrees C		VALUE		VALUE 14.2 degrees C		avg.		°C	VALUE		
I. pH	MINIMUM 6.5	MAXIMUM 7.7	MINIMUM	MAXIMUM			7	STANDARD UNITS				

PART B – Mark "X" in column 2A for each pollutant you know or have reason to believe is present. Mark "X" in column 2B for each pollutant you believe to be absent. If you mark column 2A for any pollutant, you must provide the results for at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
CONVENTIONAL AND NONCONVENTIONAL POLLUTANTS														
A. Bromide (24959-67-9)		X												
B. Chlorine, Total Residual		X												
C. Color		X												
D. Fecal Coliform		X												
E. Fluoride (16984-48-8)		X												
F. Nitrate - Nitrate (as N)		X												

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
G. Nitrogen, Total Organic (as N)		X												
H. Oil and Grease	X		5.3mg/L	69.8lbs			5.3mg/L	38.5lbs						
I. Phosphorus (as P), Total (7723-14-0)	X		<0.05mg/L	0.66lbs			<0.05mg/L	0.36lbs						
J. Sulfate (as SO ⁴) (14808-79-8)		X												
K. Sulfide (as S)		X												
L. Sulfite (as SO ³) (14265-45-3)		X												
M. Surfactants		X												
N. Aluminum, Total (7429-90-5)		X												
O. Barium, Total (7440-39-3)		X												
P. Boron, Total (7440-42-8)		X												
Q. Cobalt, Total (7440-48-4)		X												
R. Iron, Total (7439-89-6)		X												
S. Magnesium, Total (7439-95-4)		X												
T. Molybdenum, Total (7439-98-7)		X												
U. Manganese, Total (7439-96-5)		X												
V. Tin, Total (7440-31-5)		X												
W. Titanium, Total (7440-32-6)		X												

MO 780-1514 (06-13)

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"		3. EFFLUENT								4. UNITS		5. INTAKE (optional)	
	A. BELIEVED PRESENT	B. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVRG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVRG. VALUE		B. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
METALS, AND TOTAL PHENOLS														
1M. Antimony, Total (7440-36-9)	X													
2M. Arsenic, Total (7440-38-2)	X													
3M. Beryllium, Total (7440-41-7)	X													
4M. Cadmium, Total (7440-43-9)	X													
5M. Chromium III (16065-83-1)	X													
6M. Chromium VI (18540-29-9)	X													
7M. Copper, Total (7440-50-8)	X													
8M. Lead, Total (7439-92-1)	X													
9M. Mercury, Total (7439-97-6)	X													
10M. Nickel, Total (7440-02-0)	X													
11M. Selenium, Total (7782-49-2)	X													
12M. Silver, Total (7440-22-4)	X													
13M. Thallium, Total (7440-28-0)	X													
14M. Zinc, Total (7440-66-5)	X													
15M. Cyanide, Amenable to Chlorination	X													
16M. Phenols, Total	X													
RADIOACTIVITY														
(1) Alpha Total	X													
(2) Beta Total	X													
(3) Radium Total	X													
(4) Radium 226 Total	X													